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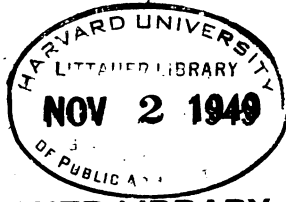
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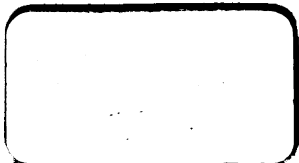
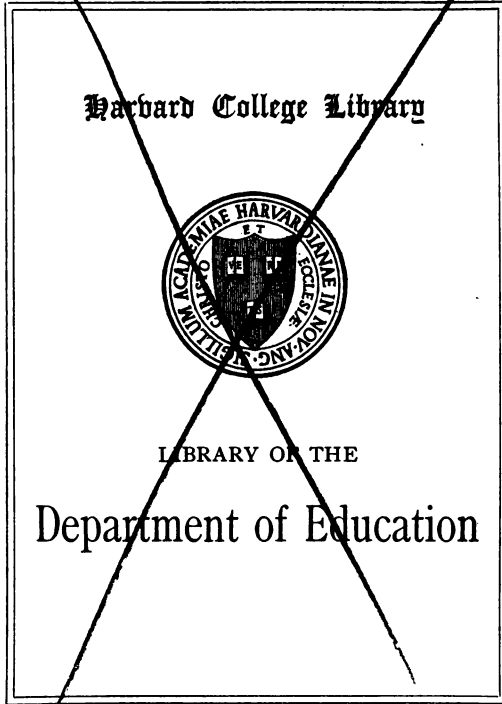
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SEVENTY-SEVENTH ANNUAL REPORT

OF THE

BOARD OF EDUCATION.

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JANUARY, 1914.



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1914.



**APPROVED BY
THE STATE BOARD OF PUBLICATION.**

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STATE BOARD OF EDUCATION.

1914.

Term expires
May 1.

BY APPOINTMENT.

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1915.	SARAH LOUISE ARNOLD,	NEWTON CENTER.
1916.	ELLA LYMAN CABOT,	BOSTON.
1915.	SIMEON B. CHASE,	FALL RIVER.
1914.	LEVI L. CONANT,	WORCESTER.
1914.	THOMAS B. FITZPATRICK,	BROOKLINE.
1916.	FREDERICK W. HAMILTON,	CAMBRIDGE.
1914.	PAUL H. HANUS,	CAMBRIDGE.
1915.	CLINTON Q. RICHMOND,	NORTH ADAMS.

COMMISSIONER OF EDUCATION.

DAVID SNEDDEN, FORD BUILDING, BOSTON.

DEPUTY COMMISSIONERS OF EDUCATION.

WILLIAM ORR, FORD BUILDING, BOSTON.
ROBERT O. SMALL, FORD BUILDING, BOSTON.

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Chief Clerk and Secretary to the Commissioner.

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ANNUAL REPORT

OF THE

BOARD OF EDUCATION.

ANNUAL REPORT.

The Board of Education has the honor to submit herewith to the Legislature, in accordance with section 6 of chapter 39 of the Revised Laws, as amended by section 4, chapter 457 of the Acts of 1909, its seventy-seventh annual report.

In Part I. the commissioner reports as to the facilities now available in Massachusetts, through public and private agencies, for the training of teachers for various departments of public education, and on the existing needs for the further development of opportunities for such training. There are also discussed in Part I. certain of the important issues of the day as to secondary education, with especial reference to the problem of improving the small high schools in Massachusetts.

Part II. of the report contains the customary detailed account of the routine work of the Board, while in Part III. an abstract of statistics compiled from the annual school returns is given.

The vacancy in the deputy commissionership of the staff of the Board, created by the resignation of Charles A. Prosser, has been filled by the appointment of Robert O. Small. Mr. Small was formerly superintendent of schools at Beverly. His special work is the supervision of State-aided vocational education.

In addition to its annual report, the Board will submit to the Legislature of 1914 the following special reports:—

An investigation relative to the publication of a manual upon the American flag (chapter 61, Resolves of 1913).

The teaching of agriculture (House order of May 6, 1913).

An investigation relative to the sites of normal schools (chapter 99, Resolves of 1913).

Respectfully submitted,

FREDERICK P. FISH, *Chairman*,
SARAH LOUISE ARNOLD,
ELLA LYMAN CABOT,
LEVI L. CONANT,
SIMEON B. CHASE,
THOMAS B. FITZPATRICK,
FREDERICK W. HAMILTON,
PAUL H. HANUS,
CLINTON Q. RICHMOND,

Members of the Board.

JAN. 1, 1914.

BOARD OF EDUCATION.

SEVENTY-SEVENTH ANNUAL REPORT.

OFFICES OF THE BOARD OF EDUCATION,
FORD BUILDING, BOSTON, MASS., Jan 1, 1914.

To the Board of Education.

The Commissioner of Education herewith submits for your consideration the appended report. The report consists of three parts as follows:—

PART I. Report of the Commissioner of Education.

- A. The Professional Training of Teachers and Supervisors in Massachusetts.
 - I. The Demand for Trained Teachers and Supervisors.
 - II. The Training of Elementary Teachers in the Massachusetts Normal Schools.
 - III. The Training of Teachers for Secondary Schools.
 - IV. The Training of Supervisors.
 - V. The Massachusetts Normal Art School.
 - VI. Proposals for the Training of Teachers for Vocational Schools.
 - VII. The State Certification of Teachers.
 - VIII. The Question of Providing Additional Facilities for the Training of Teachers.
- B. The Small High Schools of Massachusetts.
 - I. The Present Situation as regards Secondary Education in the United States.
 - II. Criticisms of Contemporary Secondary Education.
 - III. Some Conditions affecting the Improvement of Secondary Education.
 - IV. College Entrance Requirements as affecting High Schools.
 - V. General and Specific Proposals for the Improvement of the Small High Schools of Massachusetts.
- C. State-aided Vocational Education.
- D. Educational Legislation.

PART II. Detailed Work of the Board.

- I. Summary of Statistics, School Year 1912-13.
- II. State Normal Schools.
- III. Certification of Teachers in State-aided High Schools.
- IV. State Aid for High Schools.
- V. High School Tuition Reimbursement.
- VI. Registration of Teachers.
- VII. Certification of Superintendents of Schools.
- VIII. List of Superintendents of Schools.
- IX. Table of Superintendency Unions.
- X. Teachers' Conferences.
- XI. Kindergartens.
- XII. Vacation Schools.
- XIII. State-aided Vocational Education.
- XIV. State-aided Vocational Agricultural Education.
- XV. County Training Schools.
- XVI. Academies.
- XVII. Private Schools
- XVIII. Massachusetts School Fund.
- XIX. Financial Statement of the Board.

PART III. An Abstract of the School Returns made by the School Committees of the Several Towns and Cities.

DAVID SNEDDEN,

Commissioner.

PART I.

REPORT OF THE COMMISSIONER OF EDUCATION.

- A. TRAINING OF TEACHERS.**
 - B. HIGH SCHOOLS.**
 - C. VOCATIONAL EDUCATION.**
 - D. LEGISLATION.**
-
-

PART I.

REPORT OF THE COMMISSIONER.

A. THE PROFESSIONAL TRAINING OF TEACHERS AND SUPERVISORS IN MASSACHUSETTS.

The possibilities of improving public education in a commonwealth are definitely affected by the sound popular demand that the public school superintendents and teachers should be trained professionally; by the provisions for such training; and by organized efforts made from time to time to render more effective existing agencies for that purpose.

Massachusetts has a long and honorable history in training, at State expense, teachers for the public schools. Much, however, yet remains to be done to provide adequately for the effective professional equipment of teachers and other specialists who undertake to meet the demands of modern society on the public school system.

This part of the report discusses: —

I. The demand for, and the supply of, professionally equipped teachers in Massachusetts.

II. The training of elementary school teachers.

III. The training of secondary school teachers.

IV. The training of special teachers and supervisors.

V. The further development of the Massachusetts Normal Art School.

VI. Proposed plans for the training of teachers for vocational schools.

VII. The certification of teachers.

VIII. Proposals for additional State normal schools.

I. THE DEMAND FOR TRAINED TEACHERS AND SUPERVISORS.

As a result, partly of the effort to insure greater efficiency in teaching and in administering public education throughout the United States, and partly of the increasing freedom and ability

of school authorities to employ and give suitable recognition to persons possessing the qualifications for specific forms of educational work, there has developed in recent years a large and growing demand for professionally trained teachers, principals, supervisors and superintendents.

At present, in some departments of public education, the demand for trained teachers is in excess of the available supply; while in other departments the supply seems to exceed the demand. The normal schools give chief attention to the training of teachers for the elementary schools, but in spite of the fact that the Massachusetts State normal schools graduate each year about 700 teachers trained for the elementary schools, the demand considerably exceeds the supply, even though Massachusetts receives annually from other New England States a large number of experienced and, in many cases, professionally trained teachers.

Because of the existence of several private schools, as well as classes in one of the normal schools, for the training of kindergarten teachers, the available supply of these teachers is in excess of the slowly growing, or perhaps stationary, demand. It appears, also, that the demand for special teachers of household arts, commercial subjects and of drawing is not equal to the available supply of such teachers, or at least of those possessing experience.

The demand for college graduates well equipped to teach in secondary schools exceeds the supply, as there yet exist in the colleges of Massachusetts but few adequate opportunities for the professional training of those students who intend to teach. Because, however, of the large number of colleges in Massachusetts, there is always a supply, in excess of the demand, of untrained graduates who, on the completion of a general college course of four years, seek teaching positions in high schools.

While there is an insistent demand for principals and superintendents qualified to supervise instruction and to promote the efficiency of teachers, but few agencies as yet offer facilities for the training necessary to meet this demand. Harvard University has already made excellent beginnings by offering courses particularly valuable for young men with several years' experience as teachers or principals; and it is known that

Boston University, Clark College and other higher institutions are taking steps in the same direction.

Vocational schools are creating a demand for especially equipped teachers who combine a practical knowledge of a trade to be taught with skill in instruction. This need at present cannot be supplied. The agricultural college will, it is believed, be able in a few years to organize effective courses for training teachers for agricultural schools, who must combine sound technical education in agricultural science with a basis of practical experience in the art of agriculture. A few private agencies are endeavoring to train teachers for industrial schools. In all probability the State will find it necessary to maintain its own schools for preparing teachers for work in all types of vocational schools when these shall have been more generally established.

It is, then, of the utmost importance that the State should formulate and follow a comprehensive policy designed to secure, either from public or from private sources, an adequate supply of well-equipped teachers for each branch of the public-school service. The demand for these teachers will certainly grow. In the following pages are discussed some phases of the present situation, as well as proposals looking to future policy.

II. THE TRAINING OF ELEMENTARY TEACHERS IN THE MASSACHUSETTS NORMAL SCHOOLS.

Nine of the ten normal schools of Massachusetts were established for the primary purpose of training teachers for the elementary schools of the Commonwealth. Several of these schools have organized departments for training departmental teachers or supervisors of special subjects. This report discusses the present status of these schools and the efforts now being made to render their work more effective.

(a) *Present Status of the Normal Schools.*

1. The number of graduates of the State normal schools since their founding is as follows: —

STATE NORMAL SCHOOLS.	Dates when first opened.	Total number of graduates to June, 1913, inclusive.
Bridgewater,	Sept. 9, 1840	4,173
Fitchburg,	Sept. 11, 1895	826
Framingham,	July 3, 1839	3,244
Hyannis,	Sept. 9, 1897	345
Lowell,	Oct. 4, 1897	855
North Adams,	Feb. 1, 1897	696
Salem,	Sept. 14, 1854	3,423
Westfield,	Sept. 4, 1839	2,488
Worcester,	Sept. 15, 1874	1,493
Normal Art (Boston),	Nov. 11, 1873	1,726

2. The following table contains data on the teaching force, number of students admitted, number of students in attendance, and number of graduates, for the school year ending in June, 1913: —

Normal school data, showing number of teachers, admissions, attendance, etc., for the school year ending in June, 1913.

STATE NORMAL SCHOOLS.	TEACHERS IN —				TOTAL ENROLLMENT OF STUDENTS IN NORMAL SCHOOLS FROM SEPT. 1912, TO JUNE, 1913.		Average membership of pupils in model and practice schools.	New students admitted to normal schools in September, 1913.	Number of graduates from normal schools in June, 1913.	Number of graduates from the beginning.
	NORMAL SCHOOLS.		MODEL AND PRACTICE SCHOOLS.		Men.	Women.				
	Men.	Women.	Men.	Women.						
Bridgewater,	9	11	1	12	32	343	375	157	128	4,173
Fitchburg,	5	9	5	12	43	235	604	136	135	826
Framingham,	7	14	—	11	—	315	253	135	103	3,244
Hyannis,	3	6	2	4	13	54 ¹	211	56	31	345
Lowell,	4	7	1	24	1	151	1,044	81	70	855
North Adams,	4	9	—	20	—	152 ²	683	70	55	606
Salem,	8	11	2	7	26	316	575	176	105	3,423
Westfield,	6	4	1	13	—	209	515	102	97	2,488
Worcester,	6	9	—	14	3	212	485	90	66	1,493
Normal Art (Boston),	14	6	5	1	58	267	—	112 ²	65	1,726
Totals,	68	86	17	118	176	2,253	4,745	1,115	855	19,269

¹ Not including 290 students in the summer session.

² Not including 57 students in correspondence course.

³ Not including 96 evening school students.

3. The capacity of certain of the State normal schools is inadequate in one or more of the following respects:—

(a) Classrooms and other material facilities.

(b) Teaching faculty.

(c) Dormitory accommodations.

During the year 1912-13 the class and laboratory rooms at Framingham and Salem were overtaxed. In each of these schools the training or practice department has occupied rooms in the normal school building. The new training school building at Salem will relieve the congestion there, and it is hoped that within a year or two the town of Framingham will, either alone or in co-operation with the State, provide a separate and suitable building for the training school. The other normal schools have sufficient classrooms for their present attendance.

It is not easy to decide definitely whether or not a school has a sufficient corps of teachers. The schools vary somewhat in their standards and practice as to size of recitation divisions or sections, number of periods per week each instructor teaches, and length of recitation periods. At Westfield, for example, the teachers average fewer periods per week than is the case in the other schools, but, on the other hand, their recitation sections are larger. In some schools each instructor spends considerable time in supervising practice teaching, — a valuable service.

In November, 1913, the principals of the normal schools, after prolonged consideration of the amount of service each teacher should be expected to render, reached the conclusions expressed in the following statement:—

(1) The standard length of a teaching period should be from forty to forty-five minutes. Departures from this norm may be made in manual arts, physical training, laboratory work, excursions and like activities.

(2) A reasonable limit of work for teachers should be 30 recitation periods (twenty-two and a half hours) per week, to include teaching, supervision, laboratory work, consultation and miscellaneous work with or for students, but not to include preparation of teaching tasks. The standard amount of service in actual teaching ought not to exceed 20 periods per week.

(3) Time devoted to preparation of laboratory material for

recitation purposes should be considered as given to teaching service.

(4) Where a teacher has an unusual amount of library work, correction of written tasks, outside supervision, etc., the principal should have power to make proper allowances for such service.

(5) In certain courses in such special departments as household arts at Framingham, manual arts at Fitchburg and the commercial at Salem it may be desirable to exceed thirty hours per week, according to the nature of the subject.

(6) Sections for instruction should not exceed 30 pupils.

(7) Larger sections should be allowed in gymnastics, lectures, chorus singing and like subjects, and smaller sections should be allowed in manual training, domestic science, laboratory work, etc.

The Board of Education has collected and compiled exact data as to the amount of service rendered by each teacher in the State normal schools. It is difficult or impracticable briefly to summarize this data because in many cases the services of teachers are distributed between normal school instruction and practice school supervision or teaching. Again, laboratory, shop work and gardening do not lend themselves to measurement in the same way that actual class teaching does. The following figures stating the actual periods of teaching on the part of those of the faculty whose chief work is class-teaching indicate broadly standards now existing. A period is from forty to forty-five minutes.

In the Bridgewater Normal School, of 20 teachers, 11 teach from 20 to 22 periods per week, and 6 from 14 to 19 periods.

In the Fitchburg Normal School most of the teachers combine teaching in the normal school with the teaching of classes in the "practical arts school." The usual number of periods ranges from 15 to 21.

In the Framingham Normal School, of 19 teachers, 9 teach from 17 to 19 periods per week, 6, 20 periods or more, and 3 from 10 to 16 periods.

In the Hyannis Normal School 4 out of 5 teachers teach from 10 to 13 periods a week besides having detailed supervision of practice teaching.

In the Lowell Normal School, of 9 teachers, 5 teach from 14 to 16 periods per week, 3 from 17 to 19 periods and 1, 20 periods.

In the North Adams Normal School, of 9 teachers, 4 teach from 20 to 22 periods per week and 5 from 10 to 19 periods a week.

In the Salem Normal School 9 out of 14 teachers teach from 17 to 22 periods per week, 2 over 22 periods, and 3 from 10 to 16 periods.

In the Westfield Normal School 5 out of 7 teachers teach between 10 and 13 periods each.

In the Worcester Normal School, of 9 teachers, 5 teach from 14 to 16 periods, 1 from 17 to 19 periods, and 3 from 20 to 22 periods per week.

In some cases the amount of work carried by each instructor is necessarily regulated by the teaching force available. In few of the schools, for example, is there a sufficient staff to give the amount of training and instruction ideally desirable in such fields as physical education and the English branches. In the Framingham, Bridgewater and Worcester schools there is as yet insufficient supervision of the practice teaching carried on in those schools of practice other than the practice school attached to the normal school itself. In the household arts division of the Framingham Normal School it has never been possible, with the funds available, to supply an adequate teaching force for the large amount of shop and laboratory instruction required.

If each normal school teacher is to have a reasonable amount of time for study and self-improvement, and in addition, as urged in this report, is to keep in touch with educational activities in the surrounding towns and cities, then many of these teachers even now have too many classes per week. Any considerable increase in the number of students in any school should, of course, require a corresponding increase in the teaching staff available.

In no schools with dormitories (Bridgewater, Fitchburg, Framingham, Hyannis, North Adams, Worcester and Westfield) were there vacant dormitory rooms in 1912-13. At Fitchburg, where a new dormitory for 75 students was opened

in the fall of 1913, there are a few unoccupied rooms which will undoubtedly soon be in use. It has been found necessary at Bridgewater to utilize certain rooms for dormitory purposes in a building which has not been in use for some time, but this arrangement, it is hoped, will be temporary, as the building is old and unsuitable. At Framingham about 100 students are residing in the town in various private homes. It is hoped that a new dormitory will be provided for the use of these students within a year.

In general the normal schools of Massachusetts, now accommodating over 2,400 students, are utilized substantially to the limit of their facilities. Any further expansion must be accompanied by the provision of additional dormitory accommodations and by an increase in the staffs of instructors. In most of the schools, classrooms and other material means of instruction are as yet sufficient to provide for a moderate increase in the number of students. In Bridgewater a comparatively old and unserviceable building is being used for administration purposes, and also as kitchen and dining room for about 375 students and teachers. A new building for these purposes will soon be needed. A central heating plant will probably soon be required at Fitchburg.

In a special report to the Board, the business agent states that in only a few normal schools have the buildings, heating apparatus and equipment been kept in good condition. The appropriations for repairs have been insufficient for many years. The attention of the Commission on Economy and Efficiency has been called to these conditions, and it is expected that that body will outline for the benefit of the Board a comprehensive and effective program for making necessary repairs and improvements.

4. The requirements for admission to the normal school have long constituted a serious problem. When students were received from the elementary schools, as was once the case, the normal school courses were, as a result, mainly academic, rather than professional, in character. Massachusetts was one of the first States to raise the standards of admission to normal schools by requiring high school graduation as a condition for entrance.

Graduates of high schools on the approved list of the New England College Entrance Certificate Board, or of high schools approved by the Board of Education, are now admitted to the normal schools on certification. Applicants not holding certificates are required to take an examination, the questions for which are prepared under the direction of the Board. Through this inspection and the accompanying testing of the work of the smaller high schools, the Board has been able to raise to some extent the standards of high school instruction throughout the State.

Because the normal schools naturally desired to secure as students high school graduates most competent to do the more professional work of the normal schools, examinations were formerly required in such subjects as music, drawing and even arithmetic. Some high schools found it therefore necessary or expedient to organize special courses in these subjects to prepare pupils for the normal schools.

During recent years the character and scope of the entrance requirements have been materially modified. In order that high schools may have larger freedom in dealing with their own educational problems, the requirements for admission to normal schools have been made more flexible. The graduate of an approved high school is now admitted on certification, practically without regard to the program of studies he has pursued. English, alone, is a required subject. The subjects set for examination also permit a student large opportunity for offering electives. The effects of this policy have been beneficial to both high and normal schools.

5. Marked differences have always existed among the normal schools as regards courses of study and requirements for practice teaching. Each school has exhibited considerable individuality in the matter of its aims, means and methods of instruction, thus often reflecting the particular educational philosophy of the principal, or the composite opinion of the stronger members of the faculty. Within reasonable limits this is an excellent policy. It is not desirable that all the schools should be of one pattern as regards their courses and methods of instruction, although, as suggested elsewhere, general standards as to aims and practices should be agreed upon by all

schools, after which, departure from such standards may be made by individual schools as matters of conscious and purposeful policy.

It is not practicable in this report to indicate in detail the differences which have hitherto existed among the normal schools in their programs of professional training. Some of these differences have arisen from praiseworthy attempts to do experimental work in new and complex fields of education. In other cases, practices established by accident or for temporary reasons have become fixed as customs, the educational value of which must be carefully tested from time to time.

All educational practice is now in process of slow transition from a primitive stage of development, in which customs accidentally initiated, or formed by slow growth, have prevailed, to a stage wherein intelligent planning and the measurement of results shall give the basis of a more scientific formulation and control of courses of instruction, methods of teaching and general supervision.

Because of these changing conditions, the commissioner, the principals and various groups of special teachers in the normal schools have, during the last four years, been holding a series of conferences at which existing programs of normal school instruction have been subjected to careful examination, in order to discover means of making these programs more effective.

These conferences have revealed a wide divergence of views on almost every phase of normal school instruction. Each school, in one or more divisions of its work, had long followed practices which seemed to it valid. The discussion and analysis involved in these conferences resulted temporarily in a measurable unsettling of convictions, often life-long, held by many teachers. This disturbance has not wholly subsided, but in all the schools a fine and sound professional spirit has been shown in the effort to revise normal school programs in the interest of greater efficiency. Some of the proposals to this end, now under consideration, are discussed in the following section of this report.

Because of the complexity of the problems involved in training teachers, it is as yet too early either to indicate positively the prevailing forms of inefficiency in normal school programs,

or to state concretely proposed improvements. A scientific attitude necessitates careful and painstaking study of these problems. Existing practices cannot, with safety, be discontinued or hastily modified. It is, however, highly important that the principals and teachers in the normal schools shall show that they are alive to the need of steady improvement in educational practice, and that, individually, and especially by joint effort, they shall continue to give time and effort to the discovery of ways and means to secure greater efficiency.

Owing, in part, to the imperfect development of the two fundamental sciences upon which it must finally rest in its scientific form, namely, sociology which must define its aims, and psychology which must reveal its methods, all educational practice is very far as yet from attaining standards of theoretical efficiency. This fact is now being recognized; and the resulting demand for a more complete development of these sciences gives promise that in the near future education may receive valuable aid from them.

(b) Proposals under Consideration for increasing the Efficiency of the Normal Schools in training Elementary School Teachers.

A series of conferences with the principals and with the groups of teachers representing the various departments in the State normal schools have been called and conducted by the commissioner. Certain conferences have been held with the principals only, commonly on Friday evenings. The following Saturdays have usually been devoted to meetings of principals and of the teachers of some one department of the normal schools, as English, geography, history, arithmetic, music, drawing and manual training, or physical education.

In all these conferences a controlling purpose has been to define more clearly the aims and methods of the instruction and training now being offered, and to outline and inaugurate plans for co-operation in increasing the efficiency of courses of training now being offered.

The commissioner has held that when normal schools are engaged in similar work, as, for example, training teachers for the rural schools of Massachusetts, these schools should unite in an effort to define the standards of such training. De-

parture from such standards would be warranted only when made in an intelligent endeavor to meet local conditions, or in accordance with a clearly defined policy of experimentation, based on carefully formulated plans. In education, as in other fields of human activity, it is desirable to proceed on the assumption that while there are many possible programs or methods, some are better than others, and that one or more may be proved by testing and study to be the most economical and effective. When, however, there is reasonable doubt as to the best procedure, to enforce strict uniformity of practice on several institutions is unwarranted, and hampers progress by discouraging desirable experimentation.

In accordance with these principles each of the proposals discussed below represents an attempt to formulate uniform standards for more effective practice and, at the same time, to reserve to any school the right, when conditions warrant, of proposing for acceptance temporary or permanent modifications.

1. The first proposal discussed is to the effect that the purposes of each type of instruction and training offered in the normal schools shall be more effectively defined.

In every normal school the courses of study and training may be divided into two classes, namely, those designed to prepare the student directly for the work of teaching, and those which, because they contribute to the general physical, social or cultural development of the student, should find place in any school for persons of an age and attainments similar to those of normal school students. The studies in the first group are professional or vocational, since their character is determined by the particular profession or occupation for which the student is preparing; the second group may be called general, because of their value in all types of schools. A few illustrations may make this distinction clear.

Every school for young women should provide means for instructing its students to conserve their physical health, and all practices — work, rest, recreation, nutrition and corrective gymnastics — should be such as to promote permanently the conservation and right use of physical powers. This phase of general education now receives greater or less attention in all

the normal schools. Rapid developments are taking place in this field of education, and the normal schools are not all as yet equipped so that they can keep abreast of the best current knowledge and practice in physical training.

On the other hand, each school is under obligation, as a part of its professional work, to equip prospective teachers successfully to teach hygiene to the children of the public schools; to control the physical conditions of school buildings and playgrounds, in the interests of the physical well-being of childhood; and to bring the home into as full co-operation as possible with the school, in teaching the pupil to comply with the principles of hygiene.

Another illustration may be taken from the field of history teaching. It has long been customary to require in the programs of training of teachers for the elementary schools a relatively large amount of study of American history, as the treatment of this subject in the upper grades is difficult and makes increasing demands on the teacher. Relatively little attention can be given to the systematic study of ancient, medieval and modern European history in elementary school classes, although in the intermediate grades a certain amount of more easily assimilated material drawn from the fields of history — such as myths, biographies, vivid stories, significant facts — is utilized, directly and indirectly.

In so far, then, as a normal school instructs its students in American history it is conforming to its professional purpose; when, however, it offers a systematic course in ancient or medieval history, it is contributing primarily to the general education of its students.

Similar illustrations might be drawn from the departments of normal school work in formal English and English literature, science, drawing and manual arts, music and the history and psychology of education.

The conferences have shown that in some normal schools the distinction has not been made sufficiently clear between these two phases of their work. But the most pronounced and justifiable demand in the pedagogical discussion of the day is that all educational practice shall be based upon clearly defined aims. It is coming to be generally recognized that unless

we know quite well whither we are bound we are in danger of missing, or at any rate of wasting much time in reaching, satisfactory goals.

A program of physical education for general purposes can be made effective without in any way necessarily making the student a successful teacher of hygiene to small children. On the other hand, a good professional course for a teacher of hygiene may quite fail to give her certain knowledge and training which she personally should have. Both types of training are necessary, but in view of the limited time available in the normal school course, it is essential that each type should have clearly defined aims, and that the extent to which these are realized should be determined from time to time by careful examination.

Furthermore, it is certain that no satisfactory study and evaluation of the means and methods of education, such as courses of study, text-books, laboratory exercises and methods of recitation, can be made unless the aims of the studies in question are clearly conceived and defined. It is becoming increasingly clear that the largest single source of inefficiency in the current educational practice of high schools, normal schools, various forms of secondary vocational schools, and in the upper grades of the elementary schools, is the prevailing practice of accepting belief and opinion in place of tested knowledge, and the consequent basing of the practices of such schools on relatively vague and often mystical aims.

For the present an important work of the conferences is in providing more scientific and available definitions of the aims and purposes of normal school instruction.

2. A second purpose kept in view is the correlation of normal school training with the educational practices in town and city schools.

If the professional purposes of the normal school courses are to be more clearly defined, the teachers in the various normal school departments must not only be familiar with the educational practices prevailing in the public schools of the Commonwealth, but they must also manifest, habitually, a critical and constructive attitude towards these practices. The normal schools must prepare teachers for the public

schools; their graduates should be prepared to work according to standards of demonstrated worth. Within reasonable limits normal schools should be in a position to suggest and demonstrate practices superior to those generally prevailing in the public schools, and, at the same time, to lead their graduates keenly to appreciate those limitations of the public schools which are the necessary accompaniment of conditions for which there is no immediate remedy. Normal school teachers, then, should be in intimate touch with public schools in general; they should be so capable of giving help and aid that their services as advisers would be in constant demand. Under some circumstances they should be in a position to act as constructive critics of the work in particular fields.

Obviously, if normal school teachers are to perform the functions here indicated they must be allowed the time and given the necessary facilities. Principal and teachers have, in conference, agreed that such activity on the part of the normal schools is desirable; it therefore remains to provide time for the teachers and detailed plans of operation, and to secure a spirit of co-operation among superintendents of schools, all of which can readily be procured when the objects and possibilities of this proposal are well known and understood.

The execution of the general plan as proposed, involving as it does a purposeful correlation of the work of the normal schools with the work of the public schools, will make possible great improvement in courses of study and methods of instruction in all elementary schools, especially those in rural and village communities. The collective knowledge of the normal school teachers should be and is superior to any similar knowledge found in any other group of educators in the State. These teachers should be put in a position to exert an influence proportionate to their potential power and knowledge. This has not always been so heretofore, and the result has been no less harmful to the normal schools than to the public elementary schools whose work they have assisted.

3. A third proposal relates to the more effective teaching of certain professional subjects.

Close contact between the public schools and normal school teachers should develop more constructive power in teaching

the subjects commonly regarded as constituting the essentials of the elementary school program, namely, reading, writing, the various phases of English expression, arithmetic, history, geography, art, music, hygiene and elementary science. Effective methods in the teaching of certain other professional courses of the normal school must, on the other hand, be developed along somewhat different lines. These subjects are the history of education, psychology, school management and the principles of method. The normal schools vary greatly in their emphasis on, and mode of treatment of, these subjects; and it may be said that the existing uncertainty and even confusion as to the valid purposes and effective methods which should obtain in teaching them is by no means confined to the normal schools of Massachusetts.

When first introduced into professional courses for the training of teachers, these subjects were usually organized with little or no regard for the limitations of students or the actual conditions under which teaching is done in the existing schools themselves. The history of education, for example, was organized on the same basis as general history; that is, chronologically, and with substantially equal emphasis on the important educational developments of all countries and all epochs. Just how the study of the subject might be made helpful to the rank and file of teachers was never clearly considered. It will be freely conceded that it is of the utmost importance that in the training of teachers heed should be given to the development of ideas, insight and vision, as well as to the acquirement of powers in teaching specific subjects and in managing classes; but does the history of education, as commonly pursued, realize any of these ends? This is by no means clear. The same question applies to the teaching of various other general professional subjects. Does the study of psychology, as ordinarily pursued, result in visibly increased teaching capacity, general or special? Are "principles of method," as taught, capable of "functioning" in effective practice?

The trend of educational opinion at the present time is opposed to isolated and independent treatment of these subjects, and favors a deliberate correlation of them with the

more directly professional work of the school. A severe strain will be imposed upon teachers to secure such correlation and at the same time keep the instruction from becoming a merely accidental and incidental use of illustrative examples. It will be no easy task so to conduct a program of professional training for teachers as to introduce the rich materials of the history of education at appropriate times and in an effective way for the purpose of developing educational perspective and ideals. Similarly, so to use, at suitable times, the fundamental concepts of the science of psychology as to give confidence and some insight to the teacher studying the innumerable applications of that science in the various phases of the "learning processes," is a task that challenges the best of educators.

We may rest assured, however, that when once the demands for such training are clearly defined means will be found to meet them. In two or three normal schools excellent work of this kind is now done; and the others are undoubtedly conscious of their need of such work.

4. A clearer understanding of the needs, limitations and possibilities of the typical normal school student constitutes a fourth proposal now under consideration.

The conferences abound in evidence that there nowhere exists an adequate comprehension of the capacity of the typical student in Massachusetts normal schools. For many years we have been insisting on "child study" as an important element in the training of teachers of children. There is, at least, an equal need for the careful observation and study of the physical, moral and intellectual powers of those mature young persons whom we are training to be teachers.

The typical normal school student is a young woman who, while not necessarily among those graduating with the highest rank in the high school, has nevertheless made a creditable record in her studies. Her parents are usually hard working people in moderate circumstances who are making considerable sacrifices to keep their daughter in school. As racial elements change in the artisan and agricultural population of the State, so they change in the composition of the normal school student body.

It can hardly be doubted that normal school teachers, en-

thusiastic as they are, for the promotion of education in their special fields, greatly overrate the general capacity of the typical normal school student. Hence, the latter is apt to suffer from too much and too exalted teaching. Much that is taught is never assimilated, and hence not only does not contribute to real power, but, in fact, becomes a source of confusion, and hampers that development of those powers of which the student is really capable. Much of the high school education of this student, unfortunately, has consisted of "cold-storage" information and abstract statements which never effectually result in appreciation, culture or vital power of any sort; and if, as sometimes happens, even the more enthusiastic teachers in the normal school continue the process, the result is deplorable, — namely, a teacher whose attitude towards most of her work is passive, whose activities are perfunctory, and whose professional growth ceases, in a sense, before it begins.

There is indeed serious question whether the course of instruction and training as now organized in the normal schools permits enough genuine self-activity and independent thought on the part of the students. In good educational practice everywhere great emphasis is laid on providing conditions and means which encourage "self-activity" of children. Surely, in the normal school, whose purpose it is to train a young woman in two years so that, even in a country school, amidst unwonted surroundings, she shall be capable with little outside help of meeting a great variety of emergencies as they arise, it is most important that the methods of teaching, the discipline and the opportunities for social contact shall encourage self-expression, self-control, self-direction and a large sense of responsibility. The student incapable of adjusting herself to these conditions should at once, of course, be sent home, as being manifestly unfit for the responsible work of teaching.

To realize the ends here suggested will require many decided changes in the present normal school practice. Teachers must in many cases revise the methods of organizing and teaching their favorite specialties. Perhaps programs of prescribed instruction must be greatly curtailed. Means will certainly have to be devised whereby students, once satisfactory courses of action have been mapped out for them in such fields as gen-

eral behavior, recreation, hours of work, association, physical training, general reading and the like, will be expected, on their own initiative and under general oversight only, to carry such courses into effect. Inability to do this should be accepted as serious evidence of incapacity to meet the responsibilities of the teacher's work.

In the conferences this general subject has so far received tentative consideration only, but its importance is generally admitted, and it is now being made a subject for further investigation.

5. Another proposal which was given careful consideration two years ago, and under which some experimental work is now being done in several of the normal schools, relates to a differentiation of the professional training given by the school according to the probable field of service in elementary education to be entered by the teacher. It is recognized that superintendents in employing teachers find it much more difficult to obtain candidates with proper training and experience for upper grade work than for primary grade positions. Furthermore, superintendents recognize that some teachers are by virtue of their native qualifications better fitted for one division of work than another.

Experience has shown that as courses of study in the elementary schools have become more extensive and complicated, and methods of teaching more exacting, normal schools are less and less able, in the usual two years' course, to prepare teachers adequately for work in all grades; but it is certain that a two years' course properly organized will result in giving very efficient preparation to a teacher qualifying herself for work in the lower grades only. It is not as yet clear whether two years or three will be required to give sufficient preparation for upper grade work. The scholarship requirements alone made on teachers in the upper grades in such subjects as geography, history and English are large and increasing. Experience may show that the preparation of properly qualified teachers for this field of work should require three rather than two years.

Thus far the normal schools at Fitchburg, Salem and Bridgewater have organized special three years' courses to which, for

the present, only a relatively small number of students are admitted, the primary object of which is to train teachers for service in the seventh and eighth grades of the elementary schools. The other courses in these normal schools are so shaped as to emphasize preparation for the work of the first six grades. The normal school at Westfield confines its program primarily to training teachers for work in the first six grades.

Thus far these efforts may be regarded as experimental, but there is general agreement, in view of the fact that 85 per cent. of the population of Massachusetts is living under city or village conditions, where well-graded schools are the rule, that some readjustment of normal school courses of the nature here indicated is both desirable and feasible, and if properly administered will result in supplying the elementary schools with teachers much more efficiently trained for the specific work which they undertake.

6. A sixth proposal now receiving consideration relates to the provision of more adequate opportunities for professional study and general improvement on the part of normal school teachers.

The teachers in the normal schools of Massachusetts constitute a professional group characterized by great industry, professional conscientiousness, and, in most cases, by progressive spirit. It would be sound public policy to regard them at least as equally important to the general interests of education as any corresponding group of educators in colleges or other higher institutions of learning.

Satisfactory conditions for self-improvement are, however, not yet available for normal school teachers. As a rule, before becoming normal school instructors they were actively engaged in work in the public schools, as teachers and principals. At the outset of their work in the normal schools their salaries have not been large, — about \$1,000 per year for women and from \$1,500 to \$1,800 for men. The maximum salaries available — usually after many years of service — are \$1,200 — and occasionally \$1,500 — for women, and \$2,000 to \$2,500 for men.

These teachers are selected for normal school service because of the energy, enterprise and actual capacity they have shown

in other fields of teaching. But neither before entering the service of the normal school nor during such service is it usually possible for these teachers to accumulate sufficient resources to enable them to give a year to professional study or travel.

Their work in the school is engrossing; many of them teach 20 periods per week or more, and are, in addition, necessarily employed in consultation and in the supervision of practice teaching and like activities for many additional periods.

If, now, it is desirable to increase the responsibilities of normal school teachers, as proposed above, and to require from them larger and more difficult kinds of service, it is more than ever urgent that these teachers shall be given opportunity for needed professional improvement in ways not inconsistent with the economical administration of the normal schools.

One means is the grant of leave of absence on part pay. Colleges now give their instructors, periodically, leave of absence as a means of promoting the educational efficiency of these institutions. In view of the demands now being made upon normal school teachers the State can hardly do less.

Formerly, such leave of absence was given by the Board of Education, but in no systematic order, and without positive statutory authority. It is desirable that legislation enabling the Board to grant leave of absence to normal school teachers should be enacted, and that the Board should devise a policy of so employing its powers in this direction as to enhance the efficiency of the normal schools.

III. TRAINING OF TEACHERS FOR SECONDARY SCHOOLS.

The attendance on the public high schools of Massachusetts has for some years exceeded 60,000 pupils, instructed by upward of 2,500 teachers. Three hundred to 400 new teachers are required each year to provide for replacements and for the rapid gain in high school attendance, due in part to natural increase in population, but in large measure also to the growth in the proportion of all young persons now going to high school.

Massachusetts maintains few public agencies for training teachers for secondary schools, and these supply but a small part of the demand except in the two special fields of household arts and commercial education. Graduates of the normal

schools are not equipped for this work, and only rarely do individual graduates seek high school positions. A few graduates of the Massachusetts Agricultural College — a State institution — enter service as teachers of science and, occasionally, of agriculture, but the primary aim of this college is directed towards agricultural education for economic ends. The commercial department of the normal school at Salem contributes a substantial number of teachers with special preparation for positions in high school commercial departments and courses, while the Framingham Normal School sends out from its household arts department not a few teachers of this subject into the high schools.

In the main, the high schools of the Commonwealth find their teachers among the graduates of the private and endowed colleges, of which there are nearly a score in the State. These graduates vary greatly as to the kind and degree of their professional preparation for the work of teaching. The fact that high schools now rarely employ as teachers persons not possessing an academic degree insures that these teachers have a fair general education. In perhaps a majority of cases they have had considerable college instruction in subjects closely related to those which they are expected to teach in the high schools. A minority of them have had, in addition, college courses in such subjects as the theory and practice of teaching, the history of education, educational psychology and principles of method, given by the departments of education which, within comparatively recent years, have been established in various higher institutions of learning.

It must, however, be said that, in spite of the equipment described above, almost all college graduates employed as teachers in high schools are, in relation to the work they are expected to do, deficient in professional training. Even though they have had courses in the subjects which they intend to teach, and also some theoretical courses in education, they necessarily approach their work as learners, as apprentices, to whom practical means and methods of effectively teaching boys and girls are as yet almost wholly unknown.

The large majority of these graduates obtain their first experience as teachers in the small high schools. Here they ob-

tain substantially no supervision from the principal, who is always a busy, and often, himself, also an inexperienced, teacher. The superintendent of schools is not always competent to supervise high school teaching, and in rural areas he often lacks time since the elementary schools claim his chief attention. In these small high schools the novice must teach not one subject but many; not a few periods per week, but from 25 to 30. He has little time in which to study the most effective methods of teaching; he spends all his energy in trying to meet the pressing requirements of each day's work as it confronts him.

But this period, of what is in fact apprenticeship, corresponds in almost no respect to the trial year required of the graduate of a German university before he becomes, even in a partial sense, eligible for a position involving full responsibility in a secondary school. It is small wonder, then, that the teaching in small high schools is often ineffective; it may be even detrimental to the intellectual interests of the boys and girls. Because of tradition, and local efforts to improve school conditions by changing teachers, there is little continuity of service. Many high schools in rural areas lose all or the major portion of their teaching staff each year. These novices are often compelled to work with most meager equipment.

This condition of affairs has, of course, always existed. All teachers once obtained their preliminary experience under similar conditions. Heretofore, as now, the best of these college graduates have acquired wisdom and skill, after a few years, and have become strong teachers in large high schools. The weaker have sought other employment. The boys and girls on whom the young graduates expended their initial and unsupervised efforts have survived somehow the ordeal, and the State has not yet been forced or induced to provide professional training for this special class of teachers.

For several reasons the pressure for systematic training of high school teachers becomes more urgent each year. In the first place, we are becoming more keenly awake and sensitive to the wicked wastefulness of allowing the smaller high schools — those which, by virtue of their situation, surely require trained teachers and continuity of service above all things — to

be training grounds of young and partially equipped teachers. Again, it is an undoubted fact that modern demands on high school teachers are becoming increasingly exacting. People do not now, as formerly, take the results of teaching on faith. The community, more or less unconsciously, is often requiring that high school teaching shall be efficient, through defined and demonstrably valid aims and effective methods. Finally, we see more clearly than formerly the resulting benefits of professional training for high school teachers. We realize that the effectiveness of the German secondary school is due largely to the thorough training of their teachers. College departments of education are realizing what can be accomplished in America in providing adequate training for high school teachers, and are rapidly developing programs to this end. The academic departments of many colleges still fail to appreciate their responsibilities for co-operation in the training of teachers, but conditions here also are beginning to improve.

The question has often been raised as to whether Massachusetts should maintain a State institution for training secondary school teachers. New York State supports such a college at Albany; in many States the larger normal schools have departments for this purpose; while in western and southern States the State universities are rapidly creating strong departments designed to train not only secondary school teachers but also principals and superintendents of schools.

In Massachusetts, however, it seems inexpedient for the State to enter upon such work until existing institutions shall have had full opportunity to demonstrate their capacity to deal with this problem. They have heretofore trained substantially all such teachers, and have met the demands of the State and local communities in so far as these have been expressed in law or through such formal requirements as certification standards.

But if the colleges are to be assisted and guided to meet the demand for better equipped high school teachers, the State or local community must require and define professional training. The possession of a degree can no longer be accepted as conclusive evidence of a candidate's qualifications to teach any and all subjects taught in a high school. The amount and

kind of academic equipment, the preparation in method, and the practice teaching required for a given department must be clearly stated.

To define and enforce these requirements is not a proper function of the small community. Its machinery of educational administration is not adequate to deal effectively with such a problem. Hence, the State should act for these communities, and it can best act through a system of certification as described elsewhere in this report.

By means of such a system of certification the standards of the professional equipment of the high school teacher can gradually be raised. There is no doubt that most of the colleges of the State are disposed to co-operate to the best of their ability in meeting these requirements. At present any attempt to raise standards would fail because local communities are either unable or unwilling to exercise discrimination in employing teachers. An important Massachusetts institution of learning now offers superior educational courses and some practice teaching to prospective teachers, but, in seeking positions, the graduates of this college have little or no advantage over graduates of other colleges without such special preparation. It is clear that a system of certification, based on credentials showing kind and scope of professional training, is necessary, and the enactment of legislation to this end is recommended in this report.

But if the State does resolutely set about the work of improving the quality of high school teaching it will soon be confronted by the problem as to whether, under any ordinary circumstances, adequate training for such responsible work as that of teaching in high schools can be secured in its entirety during the undergraduate work of the average college student. Other States, notably California and Washington, have decided that effective training for high school teaching requires a year of special training, in addition to the time spent in securing a Bachelor's degree. It is the conviction of many students of secondary education that the problem of training teachers for the public high schools will not be solved satisfactorily until a college graduate, as a prerequisite to eligibility to teach, is required to devote a period of not less than a year of grad-

uate study to special professional preparation for his calling as teacher. In no other profession is a person expected to become proficient without special preparation for that calling. As conditions now exist college students not uncommonly do not think seriously of any calling until just before or after graduation. Many, it is true, enter business, but those who do so are able to begin in the apprenticeship stages; they are not expected, as in teaching, to assume from the outset full responsibility, almost unsupervised, for highly important work.

Massachusetts is now in a peculiarly favorable position to impose the standards here suggested for high school teachers. The supply of candidates for vacant places is usually in excess of the demand. The colleges of the State are graduating an ever-increasing number of young persons seeking service as teachers. Several of these colleges are either now equipped or could readily equip themselves to meet the requirements of a graduate year of study and practice in special preparation for teaching.

A gradual application of these standards, together with the more purposeful training resulting, would do more for the small high schools of Massachusetts than any other single measure that can now be devised, and would also do much towards creating a real profession of secondary school teaching.

IV. THE TRAINING OF SUPERVISORS.¹

As public education becomes highly organized, a clearly defined demand arises, especially in cities, for educators competent and trained to direct and supervise its processes. Originally, the "principal" or "master of the school" was the supervisor of instruction. When it became the custom to employ a superintendent he was expected to be both an expert in methods of teaching and capable of serving at least as an expert inspector of teachers' work.

With the introduction of new and unfamiliar subjects in courses of study in elementary schools it is now the usual practice to employ supervisors, each skilled in his particular field, to train and supervise teachers of these subjects. Thus

¹ The term as here used includes supervisors of the teaching of special grades or subjects, school principals and superintendents.

there are supervisors of the teaching of music, drawing, sewing, penmanship, manual arts and even of reading and nature study.

In a few school systems there are supervisors of primary teaching, when it appears that neither the school principal nor the superintendent possesses capacity for constructive supervision in these fields, according to the more modern methods of instruction.

No well-defined theory yet exists as to the functions of the school principal in constructive supervision of the teaching in elementary and secondary schools. The principal is primarily charged with school management, which often demands qualities other than those required for the supervision of teaching, and thus may be regarded as entirely distinct from pedagogical supervision. An elementary school principal is usually conceived to be a man capable of exercising authority and of making a good impression on the public. He is expected to keep the machinery of the school running smoothly. His success, as conditions now exist, depends largely upon qualifications, mainly personal and not necessarily associated with professional training. Usually, before becoming principal, he has been a teacher with strong personality and with some native capacity for organization and administration. Only rarely has he had at the outset, or later procured while teaching, any special preparation for his work as a school principal.

A demand now exists for men and women qualified to be "foremen" of public schools; that is, capable of actually directing teachers how to improve their work, and of requiring them to maintain good standards of performance. Persons with like qualities are now sought as superintendents of schools in rural areas. Only within recent years has it seemed practicable to devise programs of professional training for these principals and superintendents, but it is now accepted that such training can be given through the agency of specially adapted courses of instruction. Several universities have developed courses in the theory and practice of school supervision which have been distinctly successful.

Few efforts have yet been made in Massachusetts in training supervisors, other than those of drawing, in the State normal schools. In former years, when many of the graduates of the

normal schools were men, it was safe to assume that the best of these, after a period of experience as teachers, necessarily spent for the most part in rural schools, would become principals and superintendents. These leaders were necessarily superior men and self-made, in the sense that many leaders in other occupations may be regarded as self-made. If it is a valid assumption that women will not, as a rule, desire or be able to qualify for administrative and general supervisory positions, then it must be regarded as a misfortune to education that so few men are now becoming normal school students.

Supervisors of music are in general demand in the public schools, but so far the supply has come from private agencies which, however strong their courses in the technical knowledge and practice of music, seldom give the pedagogical training requisite for the supervisors of music. It is possible for one of the normal schools to undertake this form of special training. Tentative efforts in this direction are now being made at the Lowell Normal School.

It is sometimes assumed that there is or should be a call for supervision of such subjects as nature study, manual training and household arts. It is not yet clear that such is the case, or that sound educational policy warrants the introduction of supervising specialists in these fields. Similar uncertainty exists as to the position of supervisor of penmanship. Household arts and manual training in the upper grades require departmental teachers rather than supervisors. In the lower grades these subjects, as well as nature study and penmanship, should probably be conducted on a basis so elementary as to be well within the reach of a teacher who has had the usual course of professional training.

There is, then, a large field for the professional training of experts to fill necessary and important positions as educational supervisors, special and general. How shall this training be provided? Here is fully as legitimate a field for State effort as the training of elementary teachers, if other than public agencies cannot supply the demand.

Probably, however, this form of professional training can, in Massachusetts, be provided in large measure by the endowed colleges and other private agencies. In several colleges strong

courses especially designed to train principals and superintendents are now being organized.

The largest difficulty encountered by these institutions consists in finding students of sufficient practical experience in teaching to become good supervisors. In almost all kinds of leadership it is recognized that the man who is most qualified to lead, supervise and direct the work of others is one who, other things being equal, has himself had prolonged experience as a worker in similar fields. The foreman usually rises from the ranks. The best supervising superintendent is he who, in addition to his special equipment, has had practical experience in some phases at least of the field of work in which he directs.

An ideal program of experience and training for a principal or superintendent of schools would require preparation for teaching, varied experience as a teacher, and sufficient time devoted to the study of the special subjects containing the organized knowledge which a man in this position should have. The principles here set forth apply, probably with equal force, to technical training for leadership (that is, supervision and direction) in any field.

Experience thus far has shown the extreme difficulty of carrying out a program of this character. The substitute program usually followed is to give the young man with no practical experience an opportunity to study the principles of his profession, and to combine with such study as much as practicable of laboratory and other experience of a quasi-realistic character. In some callings the graduate of a technical or professional school is urged to begin at the bottom of the ladder and work his way up to the point where his professional equipment will be in demand. This is the plan followed by schools of mining, textile manufacture, business and various forms of engineering. The training of military and naval leaders takes a somewhat different course, because here so-called leadership is itself an organized profession, while the graduate of the professional school begins as an apprentice and at the same time also as a leader in the lower ranks of his vocation.

Training for educational direction is complicated by the large responsibilities devolving from the outset upon the man

in a supervisory position. Such a position often requires qualities that can only come from maturity and experience, the situation here being analogous to that found in the development of business leadership.

During the next few years it is expected that private agencies, such as the colleges of the State, will ascertain the extent and character of the professional training which it is feasible for them to give to educators seeking supervisory positions. In the meantime, also, State agencies should be developed for the same purpose where it is clearly necessary and expedient for the State to undertake this work.

V. THE MASSACHUSETTS NORMAL ART SCHOOL.

The Massachusetts Normal Art School, unlike the other State normal schools, trains teachers only for certain special departments of education, namely, drawing and manual training. It was organized in 1873, primarily because there existed no other agency in the State capable of training special teachers of these subjects; and secondarily to make possible the artistic training of artisans. Since 1873 the school has grown steadily until at present its attendance is in the neighborhood of 325. It has gradually added, in a variety of ways, to its original functions, especially in the direction of offering courses in industrial and applied arts for prospective industrial workers.

This school has now reached a highly important stage in its development. The building which it occupies is quite inadequate, both as regards space and as regards lighting for the needs of the students attending. Absolutely no opportunities exist for the further development of the school in its present location.

The Board of Education is submitting to the Legislature of 1914 a request for an appropriation wherewith to purchase land on which may be erected, as soon as practicable, buildings suited to the present and future needs of the school. It is urgent, therefore, that the Legislature and all others concerned should soon reach definite conclusions as to what should be the scope and aims of the Normal Art School in the future.

To restrict its activities exclusively to the training of teachers is possible but not desirable. Many educators and men promi-

nent in the economic life of Massachusetts believe that its functions should be so extended as to include not only more adequate development of the type of work already undertaken, but also the inauguration of new enterprises from time to time, as the educational and the industrial needs of the State may seem to require. The time is opportune, therefore, for a somewhat detailed examination of the history, accomplishments and future possibilities of the Massachusetts Normal Art School.

1. *Historical.*

About 1870 various persons in Massachusetts, a number of them identified with the larger commercial enterprises of the State, became convinced that if local industries were to be further developed more attention must be given to instruction in drawing. In 1869 a petition was presented to the Legislature, asking that provision be made by State law for instruction in industrial art. The petition contained this statement:—

Every branch of manufacture in which the citizens of Massachusetts are engaged requires, in details of the processes connected with it, some knowledge of drawing and other arts of design on the part of skilled workmen engaged.

The Legislature of 1870 made drawing a required study in the public schools of the Commonwealth, and also provided for the opening of evening industrial drawing schools. After a considerable campaign, provision was made for the establishment of the Normal Art School in 1873. From the discussion that took place at this time it was evident that several objects were in view on the part of those who favored the founding of this school. First, it was essential that special teachers and supervisors of drawing be provided to make possible the teaching of drawing in the schools, as required by State law. Second, it was expected that young persons preparing for work in the trades should, in some cases in this school and in some cases in the evening drawing schools in the large cities, receive that special equipment in drawing and other phases of industrial art which the industries of the Commonwealth seemed to require.

The school was first opened in rooms at 33 Pemberton Square with accommodations for 35 students. To the surprise of all concerned, the school started with an enrollment of 107 persons, of whom 68 were women and 39 men. These came from 29 different cities and towns.

The second year the enrollment increased to 237, and it was necessary to enlarge accommodations, though the school remained in the same location. At the beginning of the third year the school was removed to 28 School Street, by which time a complete course of study had been organized. Responsibility for all stages of the early administration of the school devolved upon Mr. Walter Smith, the first director, who had long been identified with industrial arts education in England.

After five years on School Street, the Normal Art School was removed in 1880 to a building known as the Deacon House on upper Washington Street. In time, however, this location was surrounded by buildings in such a way as to exclude light, and it was again necessary to find a more suitable location. The Legislature of 1885 made an appropriation of \$85,000 for the erection of a building on the lot now occupied at the corner of Exeter and Newbury streets. In February, 1887, the original building in the new site was occupied. But by June, 1898, it was made evident to the Legislature that additional room was necessary, and \$35,000 was provided for building an annex. In the buildings thus erected the school has remained to the present time, using every cubic foot of available space, and even erecting studios in the attics and basement to accommodate its large enrollment. For a number of years, owing to the encroachment of high buildings on two sides, light has been seriously shut off from many of the classrooms and studios. The situation has finally become such as seriously to impair the efficiency of the work of the school.

The Massachusetts Normal Art School was the first institution of its kind in the country. Since 1873 it has graduated a large number of students, many of whom have figured prominently in the artistic and educational activities of the Commonwealth. Some of its distinguished graduates have become heads of similar or larger institutions in other States, as New York,

New Jersey, Pennsylvania, Ohio and Illinois. Some of these schools now greatly surpass the parent institution in Massachusetts in extent and in variety of work carried on.

2. *Unsuitable Character of Present Site and Buildings.*

When the Legislature of 1880 granted the lot of land at the corner of Newbury and Exeter streets, containing 15,568 square feet of land, it gave for the use of the Normal Art School the most desirable lot then in the possession of the State near the proposed art center at Copley Square. This lot has not proved large enough for the purposes of the school. It was accepted by the Board of Education because nothing better was available. It was even then evident that high buildings would probably in the future be erected on the other side of a narrow alleyway lying to the south. There was little chance of extension westward. High buildings have since been erected across the streets to east and north as well as on the west, thus greatly impairing the lighting for the studios.

When plans were prepared for the present building in 1885, the architects, anticipating that buildings would eventually be erected on the private land to the south, across the alleyway, reserved a 30-foot yard on the southern side of the building and located on this side the offices, stairways and dressing-rooms. They placed the studios and classrooms on the north and east. In the early days of the present school, therefore, the corridors and unimportant rooms had abundant sunlight, but in preparing plans for the addition it was found necessary to shut out all of this sunlight, — to build on the line of the alleyway and to put in a series of rooms that would eventually be darkened by structures erected across the alleyway. The resulting situation is exactly that foreseen by the visitors as far back as 1878, when they endeavored to secure a site free for all time from interference with satisfactory natural lighting.

There are in the present building, in addition to the lunch room and assembly hall, twenty-four studios and classrooms. Eleven of these require artificial light much of the time. The stairways, corridors, locker-rooms, dressing-rooms and certain offices, also, must depend largely on artificial light. The conditions in the basement at lunch time when a cheerless, poorly

lighted room is so crowded that students must be seated at tables in the corridor, and are even compelled to occupy the stairways, only emphasize the unsuitability of the present structure for art school purposes.

The ventilation of an art school, particularly of one crowded to its limits as is the case of the Normal Art School, is a most serious problem. The studios and classrooms possessing broad window surfaces or exposed skylights present unusual problems of heating in winter and difficulties in ventilation in the late spring. It is well-nigh impossible to ventilate properly the present Normal Art School, and no adequate system could be installed without great expense.

The danger of fire, also, is always present in such a structure. Fire drills are held monthly, with an average record of a minute and a half in clearing the building of all students. But in a building occupied from attic to basement, and with obstructed corridors and only two important exits, a possible fire constitutes a source of constant apprehension. The possibilities of disaster resulting from fires in the surrounding buildings are also serious. The alleyway is only 16 feet wide. It is not practicable to place fire shutters on the schoolroom windows.

Almost nothing has been expended from appropriations on equipment for the Normal Art School during the forty-one years of its history. Such equipment as the school possesses has been bought piece by piece by means of the small fees collected from students for supplies. With such inadequate equipment the school has done its work as well as possible, but it has now reached a place where its history, accomplishments and its demonstrated ability to train successful teachers and specialists in industrial arts justify a more adequate equipment.

The condition of the present structure, due to its age and the small amount of repairs made on it, is such as to render inadvisable any considerable expenditure for betterments. To make the needed repairs, renovations and improvements would cost a sum of money that would go far toward providing a new building.

3. *The Future Scope and Functions of the Normal Art School.*

James Frederick Hopkins was employed by the Board in 1912 as director of art education for the State, including also the responsibilities of the conduct of the Normal Art School. He has devoted a large share of his time during the first year of his service to investigating those educational and industrial needs in Massachusetts which it appeared to be the function of this school to meet. From time to time Mr. Hopkins has reported to the Board the results of his inquiries and studies. It has not been practicable for him as yet to make a special examination of the aims, methods and accomplishments of corresponding schools in England, France, Germany and other foreign countries. Nevertheless, from his previous European studies many data have been collected, and in submitting to the Legislature a request for an appropriation wherewith to purchase a new site, the Board bases its requests upon the results of the inquiries made under its direction, so far as such results are now available.

The most important function of the Normal Art School, namely, to train special teachers and supervisors of drawing for the public schools of the Commonwealth, is now well defined. During the forty years of its history the school has graduated a large number of students who have followed teaching as a career. The results of their influence are apparent in all the public schools of Massachusetts. The course of study for prospective teachers is four years in length. It is probable that special courses, occupying an additional year, will soon be added, by means of which experienced teachers of drawing, who wish to become supervisors of this subject in public school systems, can obtain the required special equipment. The details of the program of instruction for the training of teachers and supervisors of drawing have been worked out and tested on the basis of experience. In selecting a new principal for the school the Board has arranged that he should also serve the State as director of art education, so that the Normal Art School would have a direct relation to the supervision of drawing and of manual arts in the schools of the Commonwealth.

As stated above, the training of teachers has from the out-

set been regarded as the chief function of the Normal Art School as a State institution, but it is certain that those who promoted its founding expected it also to exert a marked influence directly on the industries of the Commonwealth. As is well known, in England, Germany, Norway and other countries the demands of industry during the past half century have resulted in the founding of many schools for the purpose of training specialists in the industrial arts; that is, in those lines of manufacture and handicraft where drawing and other forms of applied art play an important part. The Normal Art School, as stated above, has from time to time added departments wherein students could study and practice to a greater or less extent in such fields as mechanical drawing, architectural drawing, the graphic arts as applied in lithography and printing, and jewelry design. These and other studies have been introduced at first in a tentative and experimental way. But even yet, none of these so-called departments, except those of architectural and mechanical drawing, are capable of sending trained specialists into the various departments of industry.

But, it will be asked, why should the State offer free education of this nature? When Massachusetts has in other schools supported various forms of higher vocational education, it has not done so primarily for the sake of giving young people opportunities to become adept in these fields. The State establishes or assists, at public expense, institutions of higher learning only, or primarily, because such assistance enables these institutions to aid in promoting the more promising lines of industrial development within the Commonwealth. For this reason the State largely supports the Agricultural College, the State textile schools at Lowell, Fall River and New Bedford, and the Nautical Training School for the training of experts in seamanship. For similar reasons it assists, with annual grants, instruction in the Massachusetts Institute of Technology and in the Worcester Polytechnic Institute.

It is on this principle, it is believed, that the State has thus far supported the beginnings of industrial art training in the Normal Art School, and there exist good grounds for maintaining that further means should be provided whereby it shall be enabled to train well-equipped specialists in applied art for

the service of various industries of the Commonwealth, instead of confining itself to the partial courses now offered. The industries differ, of course, as to their requirements for specialists who shall have had training in applied art. In such fields of manufacture as textiles, jewelry, furniture, printing and pottery there is a considerable demand for artisans versed in the fundamental principles of design and color. The building and machine-shop trades call for trained draftsmen who may become, in time, competent foremen.

In applying art to industry it is generally agreed that modern economic processes are still largely in a transition stage. Production through machine manufacture is evidently steadily supplanting production by hand processes. In any given industry it is probable that the proportion of workers needing art training is diminishing with the extension and specialization of machine methods of production. On the other hand, there appears to be a growing demand for trained specialists in fields formerly occupied by persons of relatively little training. Such a situation is said to be developing in other industrial countries, as England, Germany and France.

The possibilities open to the Normal Art School for the training of specialists in the applications of art to industry cannot at present be definitely appraised. Further experience will be necessary before a decision can be reached as to the possibilities of training designers for certain industries such as printing, jewelry-making and textile manufacturing. But a wise policy on the part of the Commonwealth requires that in providing a new location and new buildings for the Normal Art School, provision should be made for meeting future opportunities of this nature as occasion shall arise.

Among the occupations now pursued in Massachusetts in which, in greater or less degree, training in the principles of design and applied art constitutes a valuable if not indispensable prerequisite for the specialists employed, are the following (the classification being based upon the divisions of instruction found in the Normal Art School at the present time): —

TABLE I. — *Showing various occupations in which specialists trained in the principles of drawing and design are employed. Occupations are grouped according to departments of training found in the Normal Art School.*

Department I.

Departmental teachers of drawing.
Supervisors of art teaching.

Department II.

Bank note designers.
Book cover designers.
Bookbinders.
Decorative designers.
Decorative painters.
Teachers of design.
Furniture designers.
Gas fixture designers.
General designers.
Teachers of interior decoration.
Interior decorators.
Leaded glass designers.
Leather workers.
Lithographic designers.
Mosaic workers.
Music cover designers.
Sign painters.
Stationery designers.
Upholsterers.
Upholstery designers.
Wall paper designers.

Department III.

Ivory carvers.
Teachers of modeling.
Plaster modelers.
Sculptors.
Stone carvers.
Terra cotta modelers.
Wood carvers.

Department IV.

Advertisers.
Book and periodical illustrators.
Commercial illustrators.
Copper plate engravers.
Teachers of illustration.
Lithographers.
Medical illustrators.
Newspaper illustrators.
Photographers.
Photo-engravers.
Plate printers.
Printers.
Steel engravers.

Department V.

Landscape painters.
Teachers of painting.
Portrait painters.

Department VI.

Machinists.
Teachers of manual training.
Mechanical draftsmen.
Mechanical engineers.
Model makers.
Pattern makers.

Department VII.

Architects.
Architectural draftsmen.
Builders.
Building superintendents.
Carpenters.
Contractors (builders).
Landscape gardeners.
Surveyors.

Department VIII.

Wrought-iron workers.

Department IX.

Cabinet makers.
Furniture makers.
Teachers of manual training.

Department X.

Coppersmiths.
Die sinkers.
Engravers.
Jewelers.
Jewelry designers.
Seal engravers.
Silversmiths.

Department XI.

Carpet designers.
Embroidery designers.
Lace curtain designers.
Oilcloth and linoleum designers.
Printed stuff designers.
Rug designers.

TABLE I. — *Showing various occupations, etc.* — Concluded.

<i>Department XII.</i>	<i>Department XIII.</i>
Costume designers.	China decorators.
Dressmakers.	Pottery decorators.
Fashion illustrators.	Pottery designers.
Milliners.	Tile and mosaic designers.

There are good reasons for believing that, just as in the development of higher technical education the existence of a considerable supply of trained specialists has gradually brought about an increased demand for such trained workers, so in the field of industrial arts the opportunities to secure specialists adequately and practically trained will stimulate a persistent and increasing demand on the part of the industries for the services of such specialists. Because of this expectation the Board of Education is basing its request for money for the purchase of a site for the Normal Art School on the ground that the State should contemplate a probable expansion of that school along those lines which experience shall prove valuable and essential to the industrial development of the Commonwealth in coming years.

It is clear that graduates, not only of the Normal Art School of Massachusetts but of schools of applied art in other States, do now find their way as specialists into the industries here enumerated. The records of the Pennsylvania Museum School of Industrial Art (directed by a graduate of the Normal Art School) are especially complete, and tables have been compiled showing the various skilled occupations based upon applied art subsequently followed by graduates of that school. With some modifications of a minor nature the same distribution holds for graduates of the Normal Art School. The following table shows in percentages of the whole number of graduates the distribution of graduates among the groups of art industries referred to as based upon the experience of the Pennsylvania Museum School: —

TABLE II. — *Showing probable distribution by percentages of art school graduates among various occupations.*¹

GROUP.	Occupation.	Per Cent.
I.,	Applied arts in public schools,	20
II.,	Applied design,	20
III.,	Modeling and sculpture,	3
IV.,	Graphic arts,	20
V.,	Drawing and painting,	3
VI.,	Mechanical drafting,	7
VII.,	Architectural drafting,	7
VIII.,	Iron working,	1
IX.,	Wood working,	5
X.,	Metal work and jewelry,	4
XI.,	Textile design,	4
XII.,	Costume design,	4
XIII.,	Ceramic arts,	2
		100

¹ This table is very largely based upon the history of the Pennsylvania Museum School of Industrial Art. The percentages given, however, have been modified to meet known local conditions in the Massachusetts field. The chief modification has been the lowering of the percentage of Group V. (drawing and painting). The percentage of Group I. (applied arts in the public schools) has been increased over that shown in the Philadelphia field. The percentage for Group II. (applied design) has been slightly lowered, otherwise the general balance has been maintained.

4. *Varieties of Industrial Art Education Suited to the Normal Art School.*

Courses required for the proper equipment of teachers of art are now given in the Normal Art School. These courses are organized in departments or associated departments. If, however, the demand for trained specialists in these various fields was sufficient, these departments might so develop as to require a more or less independent organization as schools within the larger school, as has happened in other institutions. The departments are as shown above in Table II.

The scope of work now offered in each of these departments, or which may be developed later, is described herewith.

Department I. Applied Arts in the Public Schools. — This department includes courses for the training of teachers of drawing, design, color and manual training or manual arts in the public schools. Practice is afforded in adaptations of the

details of these subjects of study in elementary, high and technical schools. The first aim is to prepare special or departmental teachers, the best of whom, with some additional training, are expected to become supervisors of the teaching of drawing in public school systems not employing departmental teachers of that subject. Emphasis is laid on those phases of the teaching of drawing and art in the public schools which tend to establish better taste and appreciation on the part of the children. To train these teachers it is of the utmost importance that they should become familiar with the applications of art now made in the manufacture of various lines of commodities, to the end that they may be able to teach children to use discrimination and taste in the selection and use of industrial arts products.

Department II. Applied Design and Interior Decoration. — This department offers courses in design and color, as these may be of advantage, first, to teachers, and, secondly, to persons preparing to enter industry as interior decorators. Some of the courses are designed to give the fundamental training necessary to those who intend to become designers in such industrial arts fields as the manufacture of home furnishings, furniture making, ceramics and leaded glass.

Department III. Modeling and Sculpture. — The courses offered in this department, besides meeting in part the needs of teachers, also offer training for those preparing for professional work as modelers of architectural ornament, and in architectural drawing, stone carving, wood carving and the manufacture of plastic arts materials.

Department IV. Graphic Arts. — Elementary courses in graphic arts are provided for prospective teachers, and in addition advanced training in drawing is offered those who are seeking to equip themselves as illustrators, lithographers, engravers and printers.

Department V. Drawing and Painting. — In this department the courses are fundamental to the various other departments of the institution. Graduates of this department pursue advanced courses in art schools, where painters and other artists are trained.

Department VI. Mechanical Drafting. — The courses in this

department are intended for teachers preparing for positions in high schools. Special courses are offered persons who wish to become mechanical draftsmen in machine shops and other industrial establishments.

Department VII. Architectural Drafting. — Courses in this department are designed for teachers and persons who, while not trained as architects, nevertheless find employment as draftsmen, building superintendents and office assistants. A demand for such workers is known to exist.

Department VIII. Iron Working. — Only a small amount of instruction is offered in this department at present. This is designed mainly for prospective manual arts teachers. Design as applied in forging and casting is taught.

Department IX. Wood Working. — Courses in this department are mainly for those intending to teach manual arts in elementary and high schools. They not only give training in methods and technique of wood turning, pattern making, carving and cabinet work, but also include the study of design as applied to wood.

Department X. Metal Work and Jewelry. — This department offers courses in the arts of silversmithing, jewelry design and manufacture, coppersmithing and enameling. These courses are capable of being developed for the training of jewelry designers, for which there is a steady demand in Massachusetts.

Department XI. Textile Design. — The present purpose of courses in this department is to train prospective teachers to appreciate design as applied to textile fabrics. With further development these courses might be capable of giving satisfactory training to persons fitting for employment as textile designers. There is a persistent demand for textile designers who have a sound training in the fundamentals of art.

Department XII. Costume Design. — The elementary courses in this department give prospective teachers training which will enable them to develop higher standards of appreciation of costume on the part of their pupils. Courses in this department are of value to dressmakers and others engaged in costume design, to illustrators, advertisers and to commercial buyers.

Department XIII. Ceramic Arts. — At present the instruction offered in this department is designed primarily to give

prospective teachers an appreciation of the applications of art to ceramic manufacture. This department could be further developed so as to furnish training to those seeking employment as designers in pottery manufacture and in ceramic decoration.

5. *Types of Students.*

The future development of the Normal Art School along the lines suggested above requires that it should adjust its courses to a variety of groups of students differing as to their previous training, the occupations which they follow, and the time which they can give to their further education. Some of these students will come directly from high schools, while others will have had experience as teachers and as workers in industries. The following are the principal types of persons from whom applications are now received, and who may be expected to make up most of the attendance in the future: —

1. Graduates of high schools possessing marked taste and ability in art. These students, after preliminary general courses in the school, specialize according to their interests and the prospects of procuring training adapted to profitable callings.

2. Teachers of drawing who have had some service in public schools, and who desire to equip themselves for positions as supervisors through the medium of advanced courses, both those that are technical and those for teachers and supervisors.

3. Courses for public school teachers for whom classes may be held evenings and Saturdays, or during the summer according to the demand.

Constantly increasing demands are being made on public school teachers to become efficient not only in teaching the elements of drawing and applied art, on the side of execution, but also from the standpoint of finer appreciation.

4. Artisans and other workers in the industries and commercial callings who desire special or additional training to qualify themselves for the practice of those phases of their callings involving applied art.

Extension courses, having both day and evening classes, will doubtless from time to time be organized in those industrial centers where distinct demands are manifested. Such demands might arise for classes in jewelry design in the North Attleborough region; or for classes in textile design in the Merrimac valley region; or for classes in machine draftsmanship in centers like Worcester and Springfield.

At present, because the development of many of the departments has been hampered, it is not possible to predict the scope or character of the attendance that would result if such departments were prepared to train the kinds of specialists in applied art demanded by the industries. The history of art education in other States, and especially in countries like Germany and England, indicates that a large demand will follow the offering of adequate and practical courses. More detailed data on this subject will be available later in the offices of the Board of Education. It will doubtless be necessary to organize courses of an experimental nature, as has been done elsewhere, in order to discover what are the possibilities and the actual demands for special training in certain fields of applied art in Massachusetts. It would be premature for any one at present to decide on what may be within a few years the extent and character of the demands for highly trained designers in such fields as furniture making, ceramic manufacture and printing.

6. *Buildings needed by the Normal Art School.*

The Normal Art School site should provide adequate space for the erection from time to time of such buildings as the future needs of the school require. At present it is not practicable to indicate in detail these buildings, partly because, as stated above, time and experiment are required to show whether certain departments of industrial arts are to be extensively developed in Massachusetts, and partly because the Board has not yet had the opportunity to study in detail the buildings and equipment found necessary or useful in other schools of applied art in America and abroad. The director of the Normal Art School has been engaged for some years, and through many seasons of European travel, in collecting data on this subject, but the task is large, and requires further time to determine the nature of the development which Massachusetts needs.

It is evident, however, that space should be provided for the following buildings: —

1. *An administration building*, to contain also studios and classrooms. This building should provide space and accommodations at least 33 per cent. greater than those in the present

building, even if the membership of the school remains the same as now.

2. *An applied arts or industrial arts building*, to contain such laboratories, workshops and other provisions for applied arts education as experience may show to be necessary in connection with some or all of the departments suggested above. This building should be of factory type, and should be planned as a series of units to which addition can be made from time to time as circumstances require.

3. *A Heating Plant and Power House*. — This building should be separate from the buildings described above, and the site should be such as to permit of such separation.

4. *A Dormitory*. — There should be, at least, one dormitory on the grounds of the Normal Art School. The need for this is discussed below.

5. *An Industrial Arts Museum Building*. — It has been the experience of countries extensively engaged in the manufacture of products involving applications of art to a considerable degree that one of the most useful agencies in elevating standards of production is an industrial arts museum in which to display types of art work brought from all parts of the world, as examples of craftsmanship and manufacture which prove stimulating and instructive to workers and teachers in these fields. There is undoubtedly a place for such a museum in Massachusetts. It is believed that sooner or later persons disposed to make gifts to the Commonwealth will provide funds for the erection of a building of this nature. Such a building should be an integral part of the Normal Art School scheme, and, therefore, space should be allowed whereon may be erected, when the time comes, an industrial arts museum of sufficient size to prove a center of influence for the State as a whole.

7. *The Need of a Dormitory.*

The Normal Art School has never had dormitory facilities. It is of the utmost importance that space should be allowed in its new location for the erection of a dormitory when funds for this purpose become available. The Normal Art School is a State school and the only one of its kind in the State; consequently, its attendance is and will be in large measure drawn

from all parts of the State. One half or more of its students are young women. Even if the Normal Art School possessed adequate facilities for supervising the living arrangements of those of its students who do not live at home, nevertheless, such residence would necessarily be under unsatisfactory conditions and, to some extent, unsafe. As the Normal Art School now possesses no dormitory and can exercise only ineffective supervision over the living arrangements of its students, a very large proportion of its attendance is from the metropolitan area, which is equivalent to saying that, in general, parents find it expedient to send their children to school only when these can live at home. Even under these conditions attendance is often unsatisfactory, as in cases where students must travel from two to four hours per day by steam and trolley roads.

8. *Site.*

A site suitable to provide adequately for the buildings described above and for the probable future development of the Normal Art School will require approximately 960,000 square feet of land. This should be located near enough to the center of the metropolitan district of Boston to render access thereto comparatively easy. Furthermore, it is of the utmost importance that this site should be of sufficient extent to make it possible to place the buildings of the Normal Art School so far apart as to insure that each room shall have ample and uninterrupted light. The site should also be so located that buildings on private property adjoining can in no way interfere with the direct light of any of the normal school buildings. Rooms and halls devoted to art education and museum purposes should have not only abundant and direct light, but should be safeguarded as far as possible against cross or reflected light. A desirable site for this school would be an elevated tract of land safeguarded on all sides, and large enough to permit the location of the buildings at some distance from the street line.

9. *Recommendations.*

It is in view of the present and probable prospective needs of the Normal Art School, and because the Board is convinced that in selecting a new site ample space should be provided for

buildings and equipment likely to be required by the developments of the next twenty-five or fifty years, that the Board is submitting a recommendation for an appropriation sufficient to purchase a tract of land to afford room for the erection, under proper conditions of lighting, of the following buildings:—

1. An administration building.
2. An applied arts or industrial arts building.
3. A heating and power plant.
4. A dormitory.
5. An industrial arts museum.

The tract should be on fairly high land, and in a location easily reached from any point in the metropolitan area. It is estimated that the cost of such a site will be \$250,000.

The Board, in order that the Commonwealth may be in a position to secure the best terms, does not recommend at present any particular site or sites for consideration.

VI. PROPOSALS FOR THE TRAINING OF TEACHERS FOR "VOCATIONAL SCHOOLS."

Massachusetts has embarked seriously upon the work of establishing vocational schools of secondary grade. The State now gives financial assistance to communities maintaining the following types of vocational education: (a) Industrial schools giving full-time instruction; (b) evening industrial schools; (c) agricultural schools giving full-time instruction; (d) household arts schools giving full-time instruction; and (e) evening household arts schools. In 1912 legislation was enacted providing also that State aid be given to communities maintaining approved part-time or continuation schools, and it is probable that within a year or two a number of communities will have undertaken this type of instruction.

There exist in Massachusetts at the present time no agencies the controlling purpose of which is to train teachers for vocational schools of the types just referred to. During experimental stages in the development of vocational schools for the last half dozen years it has been necessary to procure as teachers persons who had indirectly qualified themselves in a degree for this work, either in schools or through the pursuit of their trades or other vocations. But it is undesirable and

impracticable to depend longer upon such irregular sources of supply. If vocational education is to receive proper encouragement, agencies must be created, the primary function of which shall be the training of teachers for what is, in all essential respects, a new form of public education.

Obviously, in undertaking this responsibility the State should not duplicate the work of existing agencies wherever these give promise of good results. The Massachusetts Agricultural College does not now give to young men adequate professional training to enable them to qualify as teachers of agriculture and related subjects in agricultural secondary schools, but it is clearly desirous of perfecting this phase of its work, and as rapidly as it can provide the necessary facilities, it may be expected to offer courses sufficiently complete and practical to insure that approved graduates therefrom will be qualified to undertake teaching in agricultural secondary schools.

It is possible, also, that existing private agencies, such as Simmons College and the Women's Educational and Industrial Union, may be able to give the combined practical and technical training necessary for those who are to teach in girls' trade schools and day and evening schools of household arts. Experiments in this direction are being carried on, the results of which will be valuable.

But it is now evident that existing manual training schools and technical schools are not in a position to give satisfactory training to prospective trades and industrial teachers. Experience has shown that the primary qualities required in such teachers are to be obtained only through actual participation in the industrial and trade processes as these are carried on under commercial conditions. A few graduates of technological schools, by virtue of their subsequent experience and participation in industry, become in a degree equipped to direct vocational education but rarely to serve as trades teachers in industrial schools.

The Board realizes that any plans for the training of vocational teachers must as yet be largely tentative and experimental. The various difficulties to be encountered have been set forth in a detailed report recently prepared for the National Society for the Promotion of Industrial Education by a special

committee, which carefully studied the situation as it exists throughout the country.

As this report clearly indicates, the great difficulties to be encountered by any plan for the systematic training of vocational teachers grow out of the fact that these teachers must, in a sense, be masters of two callings, namely, that of craftsmen in the vocational department which is to be taught, and, in addition, that of teacher. No person can successfully teach in a trade school who has not himself had successful experience under commercial conditions and as a trade worker. This appears to apply not merely to shop teachers, so called, but also to those who are expected to teach the studies and subjects related to shop practice. On the other hand, experience clearly indicates that a man who is already a good mechanic will only rarely give good service as a teacher unless he has been, in a measure, especially trained to meet the problems peculiar to the management and teaching of classes of young people.

Under conditions as they now exist it seems undesirable and impracticable to organize a school for the training of vocational teachers which shall admit as students inexperienced young people who have had as previous preparation only instruction in the regular public schools. It is for this reason that the Board does not find it expedient to use an existing normal school for the purpose of training vocational school teachers, even if available facilities of these schools were not already fully pre-empted in doing the work for which they were organized.

In fact, it does not seem practicable to found in any part of the State a separate training school for industrial teachers. Much more feasible is the plan to establish, with State aid, evening classes wherein young mechanics, and others who have already served an apprenticeship in their respective callings, can receive such specific and practical training in methods of teaching and class management as will in a measure qualify them to become teachers. It is highly probable that such evening classes, properly conducted, and open only to carefully selected students, will give young men in one or two years sufficient insight into right methods of teaching so that they can render fairly effective service as teachers, provided their training as workmen has been satisfactory.

A further means toward such training that should be encouraged by the State consists in providing, in existing vocational schools, assistantships, with small salaries attached thereto, which may be taken by properly qualified persons who have served an apprenticeship, and in which positions they can, while giving assistance to teachers, take special courses in methods of teaching and class management by means of which they also will within a short period become qualified to render good service.

In the various large industrial centers found in Massachusetts it should not prove difficult to attract to the evening classes proposed above, and to assistantships, young trades workers who possess something of an instinct for teaching. Teaching positions in vocational schools must of necessity be made sufficiently attractive, by virtue of the salaries offered and other conditions, as to be able to draw from the industries young persons possessing natural qualifications as teachers. What is now needed is the organization of the necessary machinery to effect these ends.

If the State gives the Board the necessary financial aid it is proposed to establish evening classes and assistantships in the larger industrial schools of the State, notably those in Boston, Worcester, Springfield, Lowell and New Bedford. Possibly good opportunities will be found also in other communities. There is, of course, presupposed, a co-operative attitude on the part of the local authorities in charge of these industrial schools, which it is expected will not be difficult to procure, in view of the needs experienced for trained vocational teachers throughout the State. In each of the centers named above there are at the present time not only well-developed and efficient industrial schools, but many large industries exist from which suitably equipped apprentices may be expected to come. In the course of a few years it is hoped that graduates of these industrial schools, having had some practical experience, will return and undertake to qualify themselves to become teachers.

For purposes of instruction it is intended to utilize, where practicable, the buildings and equipment of existing industrial schools, and also the services, in part, of members of the teaching staff. The courses established will be designed not merely

for persons seeking to become teachers, but also for persons now serving as teachers who desire further instruction for their work.

For the present it is contemplated that the evening courses proposed shall be carried on for the same length of time each year as regular evening school industrial courses, namely, two sessions every week for twenty weeks, each session being about two hours in length. It now seems probable, in view of the character of the demands for efficient service made upon teachers in vocational schools, that young persons after having taken the evening courses referred to above, will in the majority of instances first receive employment as shop assistants in industrial departments. For a period thereafter these teachers would still be serving, as it were, an apprenticeship in teaching, under such conditions that the director of the school and the head of the particular department will carefully supervise the work of the instructor and train him along needed lines.

To put fully into effect the plans here submitted by the Board will require that an agent should be employed who will give his entire time to the organization and supervision, and perhaps teaching, of the classes proposed. Under the direction of the deputy commissioner in charge of industrial education, this agent should have large responsibilities for investigating means and methods of training vocational school teachers. It will be necessary for him also to devote a considerable share of his time to conferences with students preparing to teach, in order that these may become acquainted with the requirements of the State Board as to the organization of courses of instruction, methods of teaching and the management of classes.

To supplement the work of the State agent it will be necessary to select in each center where classes are maintained a director, who will probably in most cases be the director of the local industrial school, who will give a part of his time to this additional service. This director should be charged with immediate responsibility for the organization and management of classes, and probably for part of their instruction. Besides the director, teachers in the local industrial school would give such instruction as is practicable in their various special lines of work.

Obviously, then, instruction to be carried on for the training of teachers will be divided among several persons. Agents of the State Board charged with supervision of particular phases of industrial education will from time to time discuss the phases of work with reference to which they possess special information. The State agent in immediate charge of the work will give lectures and instruction, especially in the pedagogical problems found; the local director and successful teachers in the local school will successively present phases of instruction in which they are most competent; while under some circumstances other instructors may be employed for particular purposes.

The estimated cost for the successful execution of the plan described above will involve the following items: —

Salary of agent in charge,	\$3,000 00
Salaries of 5 teachers giving part-time instruction, \$100 each,	500 00
Expenses for miscellaneous instruction,	500 00
Incidental expenses for traveling, books, materials of instruction, etc.,	1,000 00
Total,	<hr/> \$5,000 00

For the fiscal year 1914, the amount asked for is \$2,500, in the expectation that the organization of this work could be begun as soon as the Legislature has made the necessary appropriation. The agent in charge should be at once employed in order that during the summer he may plan the details of the courses to be offered.

In view of the fact that the Board must approve all teachers in industrial schools, and that in practice general standards are maintained to this end, it is proposed that as soon as practicable it shall be made a condition of employment in industrial schools that a candidate shall have qualified himself through the medium of the training proposed above or in some other equivalent manner.

The foregoing plan relates primarily to training of teachers for boys' industrial schools. Plans are already being considered for the training of young women to become teachers in girls' trade schools and in schools of home making. Further experience in the organization of courses for these schools, and in the study of valuable material for teachers, must be had before detailed plans can be suggested.

VII. — THE STATE CERTIFICATION OF TEACHERS.

The general experience of other countries, and of States other than Massachusetts, is that uniform and desirable standards of professional qualifications on the part of those employed in the public school service can be defined and maintained only through a system of State certification. Under State certification it is required that employing authorities shall choose from a list of certificated persons those whom they elect to teach or supervise in the public schools. The State, through proper authority and by examination or otherwise, decides who are qualified for school positions on the basis of minimum standards of efficiency. Certification does not guarantee, in any final way, the efficiency of those holding certificates, but it does serve to eliminate a large number of possible teachers who are manifestly unqualified.

Without a State system of certification standards of efficiency in public education are affected in a variety of ways. Indifferent and unprogressive communities are free to employ as teachers persons who have made no adequate preparation for their work. Men and women who have taken the time to prepare themselves professionally are discouraged because they find themselves in competition, seemingly on terms of equality, with others of inferior qualifications. Local standards of educational efficiency are in the long run greatly affected by the scope and character of the professional training which the teachers in their schools have received; and the quality of such training can in large degree be defined through right standards of certification.

But if communities are left free to employ as teachers those who may or may not be properly qualified, local standards will vary greatly and will be low in many places. In Massachusetts educational standards vary as widely, if not more widely, than in any other State in the Union, this condition being in a measure attributable to the absence of any effective means of establishing minimum uniform standards throughout the Commonwealth. In many towns the local agencies of school administration are not equal to the task of selecting from among many possible teachers, trained and untrained, those who possess the qualifications most needed in the local schools.

It is highly desirable, therefore, that in the present stage of educational development in Massachusetts all towns required to be in superintendency unions should be brought within the operation of a uniform certification law; that is, that they should be permitted to employ only teachers possessing legal certificates issued by a proper State authority. Nearly all of these towns now share in the income of the Massachusetts school fund, and they are also assisted by the State in providing salaries for their superintendents. Some of them, fortunately not a large number, make little or no effort to procure trained teachers when vacancies occur. They are willing to employ local high school graduates who have had no professional preparation for their work. This condition exists, in part, because of the low salaries paid, but it is clear that great harm results, not only to the children coming under these untrained teachers, but also to the local standards of educational efficiency. It is the experience of the Board that the operation of the high school certification law now in effect in a few communities is proving beneficial. School committees usually welcome the service which this certification system renders in assisting them to select teachers.

A proper system of State certification requires that, as far as possible, formal written examinations shall be dispensed with wherever teachers, superintendents or others to be certificated have received systematic professional training according to approved standards. Certification should be based when practicable on credentials, containing suitable evidence of such professional training. Written examinations should be held for teachers only in those departments of public education, professional training for which is not now given at all, or only to numbers insufficient to meet existing demands. It is obvious that written examinations for persons seeking positions in elementary schools should be held in various parts of the State, perhaps in the State normal schools. These written examinations should be of such a nature as to eliminate as far as practicable those who are manifestly least fitted to teach.

In the case of normal school graduates, of course, no written examinations would be necessary. A certificate that the student had completed courses in the normal school should

entitle such a person to a provisional teacher's certificate, after which a diploma, based upon graduation and a period of satisfactory experience, should be regarded as the equivalent of a life or permanent certificate.

In the case of high school teachers, it is probable that written examinations would not be required. Young persons who have graduated from college, and in their courses have taken the amount of professional work required for teaching in any high school department, would be certificated on the basis of credentials, provided these were approved by the proper authorities in a college, of which the standards of work are acceptable to the Board.

In the case of superintendents of schools, it will continue for some time to be necessary to issue certificates on the basis of written and oral examination only. The reason for this is that few schools for the professional preparation of superintendents yet exist, whose standards are so well established as to merit certification on credentials. It is to be expected that in time such schools will exist in a larger number than at present, and that the standards of their training will possess well-defined characteristics enabling certifying authorities to grant certificates on the basis of credentials.

Certificates, whether for teachers or supervisors, should always be of two kinds, namely, preliminary or provisional, and permanent or for life. Provisional certificates should be issued on the basis of credentials or examination, and need not presuppose actual experience in the field of teaching for which the certificate is sought. The provisional certificate should be valid for only two or three years, and should be capable of but one or two renewals without further examination, the intention being that as soon as practicable the holder should obtain a permanent certificate.

A permanent certificate for teachers or supervisors should be issued to persons possessing on the one hand proper professional training, and on the other hand a measure of approved experience. In the case of normal school graduates, as stated above, graduation from the school would entitle a student to a provisional certificate, whereas two or more years of approved experience within the State would entitle her to a permanent certificate.

In view of the extensive development of systems of certification in other States, where interstate comity as to the recognition of such certificates has been widely developed, it may be expected that Massachusetts would in time enter into arrangements whereby she would give recognition to certificates issued in other States, and would, equally, obtain recognition for those issued here.

Each type of certificate should indicate clearly on its face the specific field of public school service for which the holder has been found qualified. For example, no certificate should be issued authorizing the holder simply to teach in a high school; it should clearly designate the subjects in which the applicant has qualified himself to give satisfactory teaching service. No certificate should be issued authorizing a person to do supervisory work unless, in addition to having had teaching experience, he has given some attention to professional equipment for supervisory work.

The chief purpose of any system of certification is to raise standards of professional training and teaching efficiency. The second purpose is to protect the interests of school children in communities possessing low standards of school administration, whether through ignorance, indifference, or for any other cause. The third purpose, of much importance at the present time, arises from the fact that the State now supports a retirement system for teachers, and may establish some form of permanent tenure. If the State is to be responsible for the payment of considerable sums of money as pensions to teachers, and if by legislation it compels local communities to give some form of permanent tenure to teachers, it is of the utmost importance that there shall be provided some State supervision directed towards ascertaining the qualifications of those who are to be employed. Such supervision can best be exercised through a system of certification.

The Board elsewhere recommends to the Legislature the enactment of legislation necessary to carry into effect the suggestions proposed above, and submits a proposed bill to that end.

VIII. THE QUESTION OF PROVIDING ADDITIONAL FACILITIES FOR THE TRAINING OF TEACHERS.

In previous sections of this report the following conclusions have been reached: (a) existing normal school facilities are being used substantially to the maximum of their capacity; (b) it is not at present expedient or necessary that the State should undertake the training of secondary school teachers; (c) the State should enter upon the work of training teachers for vocational schools, but for this purpose no new normal schools or additional buildings are necessary for the present; (d) the Normal Art School should be provided with a new location and new buildings; and (e) the need of men trained to teach in the elementary schools and qualified eventually to become principals and superintendents is pressing and may have to be met by the provision of training facilities other than those now existing.

In view of the undoubted fact that the demand for teachers trained in the normal schools will steadily increase, the question as to whether it should be the policy of the Commonwealth to add to the number of State normal schools or to increase the accommodations of those now existing becomes an important one.

In proportion to population, and especially in proportion to area, Massachusetts has more (separate) normal schools than any other State in the Union. As one result the State has a larger proportion of trained teachers in the public schools than any other State; as another, opportunities for normal school attendance is easily possible to a large majority of the residents of the State, even in the case of pupils desiring to attend as day students.

But there are disadvantages connected with this multiplicity of normal schools. Each school must offer a rounded program of professional instruction with proper specialization of work on the part of instructors. Hence the per capita expenditure of a small school is necessarily large. Again, because of the small size of each of the normal schools in the State, it is not practicable to pay to heads of departments salaries equal to those offered in other States which have larger normal schools. The

result is that for many years Massachusetts has been steadily losing its most expert normal school teachers. The maximum salaries paid teachers in the Massachusetts normal schools are, to women \$1,500; to men, until recently, \$2,300, and now \$2,500; but larger schools in other States pay as much as \$2,000 to women and \$3,000 to men, as heads of departments. The overhead and administration charges for a small school are invariably larger in proportion to attendance than for a large school.

As regards accessibility, a distinction must be made between those students who desire or can afford to live away from home and those who, while continuing to live at home, desire to attend as day students. For the former class, Massachusetts now offers ample opportunities as regards the accessibility of its normal schools. The State is geographically small, and the six normal schools, which are now provided with dormitories, are so distributed as to be easily reached from all parts of the State.

On the other hand, for students finding it necessary or desirable to live at home while procuring their professional training the situation is not so satisfactory. Students in several parts of the State must travel more than two hours each day in order to attend a State normal school. Only two of these regions, however, contain large populations. One of these is the suburban area around Boston, and the other is that part of Bristol County which includes the manufacturing cities of New Bedford and Fall River.

The city of Boston maintains a normal school, but non-residents attending this school are charged a heavy tuition fee. Consequently, residents of Cambridge, Somerville, Brookline, Chelsea and other suburbs, desiring to attend a normal school as day students, must go either to Framingham Center or to Salem, — in either case being obliged to travel from two to four hours daily.

Day students from the Fall River-New Bedford area must attend either the Bridgewater or Hyannis school, and to do so must travel upwards of two hours daily. Until recently, New Bedford supported a school or class for training its own teachers, and such a class is still in existence in Fall River. But

with rising standards in education, the city training class, which was formerly found in many communities, has proven inadequate and unserviceable as a means of supplying trained teachers. The students were local high school graduates and the course of training was necessarily short. A city that employs as teachers only graduates of its own high school soon suffers from educational inbreeding.

For these reasons New Bedford has discontinued its training class, and there is reason to believe that Fall River desires to do so also. Hence proposals have recently been made in the Legislature looking to the establishment of a State normal school adjacent to Fall River and New Bedford.

It is, of course, obvious that the founding of another State normal school on any extensive scale will involve large expense. Furthermore, it is clear that normal schools to be accessible to day students cannot be established so as to accommodate all the residents of the State. The question, therefore, of the establishment of a normal school in the vicinity of Boston or in the Fall River-New Bedford region cannot be considered with reference to the apparent needs of these two regions alone. The State as a whole must be considered, and a wise policy for the State as a whole must be followed.

Where a choice must be made between establishing an additional school and expanding an existing school to meet the demands upon it, sound policy surely dictates the latter course. The normal schools do not exist for the sake of the young people whom they educate; they were organized for the purpose of training teachers for the public schools. Their further development must be controlled by considerations as to what will prove the most effective and most economic means of training an adequate supply of teachers for the public schools of the Commonwealth as a whole.

From this point of view the time has not yet arrived for the Commonwealth to undertake the establishment of additional normal schools, except, possibly, a smaller one for men students, as hereafter described. The State has yet to meet large obligations to existing schools if a sound policy obtains. A new dormitory is urgently needed at Framingham; new buildings must be provided for the Normal Art School; a dining

hall and administration building at Bridgewater will soon be indispensable; within a few years a new dormitory will certainly be required at North Adams; while in Framingham, Bridgewater and Worcester it should certainly be the policy of the State to share in the erection of suitable practice schools in view of the inferior accommodations now available. The question of a new location for the Worcester Normal School has been before the Board for several years, but no decision has yet been reached.

Under the circumstances it seems clear that the time has not yet arrived when proposals for additional schools for the training of women teachers should be entertained. Those who are seriously bent on becoming teachers can attend existing schools which are supplied with dormitory facilities. The total expense of such attendance, \$160 per year, is not excessive. It is generally agreed by observers that residence in a dormitory for two years contributes much to the general development of those who are to be teachers.

From time to time the suggestion has been made that the State normal school at Hyannis should be moved to a point nearer the center of the New Bedford-Fall River area. There can be no question that the present location of the Hyannis school is an unfortunate one from the standpoint of its accessibility to any considerable number of day students. As a consequence, its attendance has always been small, and its per capita expense of administration large.

But the school at Hyannis has come to have a well-established place in the educational life of the Cape. It has had peculiar success in training teachers for the rural schools of that region. In connection with it a large and successful summer school has been developed, the influence of which is felt throughout the State.

Furthermore, to move this school would result in heavy loss to the Commonwealth. The State has, at Hyannis, two large buildings — the main school building and a dormitory — which would probably be unsalable except at a heavy loss.

For these reasons, while granting that it was not sound policy which originally dictated the location of the Hyannis Normal School, the Board believes that it would be neither expedient nor desirable now to remove that school to another location.

In the earlier stages of the development of normal schools in Massachusetts, as in other States, the number of men students was substantially equal to the number of women. The large majority of the men thus trained rendered their first service as teachers in elementary schools, often in rural communities. Many of them later became school principals and superintendents.

During recent years the proportion of men students in the Massachusetts State normal schools, as in almost all other States in the Union, has greatly diminished. At the present time, in a total attendance of over 2,400 in the normal schools of Massachusetts there are probably not more than 50 men fitting themselves for positions in the elementary schools.

A variety of causes are responsible for this condition of affairs. In the first place, it is undoubtedly true that elementary school teaching does not now offer to young men a satisfactory career in view of the compensation offered as related to the standards of ability demanded. Formerly, when the service was not so exacting as at present, many young men found it easy and profitable to begin their life work in teaching; but young men qualified to meet the demands now made on elementary school teachers can obtain much higher salaries in other lines of work.

Again the falling off of men students in Massachusetts normal schools can in a measure be associated with the decline of the agricultural population. Farmers' sons have always constituted the largest single source of supply of teachers. In States like Maine, Minnesota and Washington, even at the present time, a large number of farmers' sons having intellectual interests fit themselves for rural school teaching, and there obtain valuable experience for other and more advanced lines of educational work.

The most obvious cause of the decrease in the relative number of men in the Massachusetts normal schools has been the establishment of higher standards of admission. Formerly, students were admitted to the normal schools directly from the grammar schools. In course of time high school graduation was required. As a result a young man now finds himself able

to enter college with substantially the same preparation as is required to enter the normal schools. Those who are financially able naturally prefer to attend college.

It is also certain that the attendance of men has been affected by the large number of women attending the normal schools as now organized. It is generally conceded by those familiar with co-educational conditions that when in any given course or department the proportion of women students comes to exceed that of men, such course or department becomes unpopular with men students. At the present time, undoubtedly, a considerable number of those men who might elect teaching as a calling prefer to avoid the normal schools on account of the large number of women students.

It is hardly practicable to bring into the normal schools, as now organized, any considerable number of men students, except in departments preparing manual training or commercial teachers. On the other hand, there are good grounds for believing that if conditions could be so shaped as to result in an increase in the proportion of men teaching in the elementary schools, public education would be materially improved. Many rural schools present conditions which can best be met by a man as teacher. In the upper grades of village and city schools there are many positions where the influence of a strong and virile man would be of immediate and direct benefit. Educational readjustment now taking place will create a strong demand for men for these positions. At the present time no single agency anywhere in New England is training any considerable number of men as superintendents of schools. Superintendency positions can best be filled by persons who have had experience as teachers in the elementary schools, and who have added to this experience enough professional training in graduate departments of universities or elsewhere to qualify themselves for administrative work.

The establishment of a separate normal school for men only would at the present time be probably one of the most profitable educational investments that Massachusetts could make. Such a school would not necessarily be large. It should have a body of students composed of young men who have deliberately elected to prepare for teaching positions with

the view ultimately of securing administrative positions. A superior school of this character, with suitable dormitory facilities, would undoubtedly tend in time to develop a professional spirit in its student body which would result in large benefits to the schools of the State.

Such a school should offer three courses:—

(a) A two years' course for persons fitting themselves for principals of rural schools.

(b) A three years' course fitting young men to be departmental or grade teachers in the upper grades of village elementary schools.

(c) A course of one or two years, open only to young men of successful experience as teachers, devoted primarily to fitting such persons as principals and superintendents of schools.

A normal school for men should be located near a large center of population, although probably not in a metropolitan district. This center should contain one or more colleges under the influence of which such students might come in a measure, and with which some affiliations as to certain courses might be made. The city of Worcester is a peculiarly favorable center for a school of this character.

The question may be raised as to why such a school might not be established in connection with the agricultural college at Amherst. The professional character of the work done in the Massachusetts Agricultural College is such as to disqualify that college for the training of teachers for elementary schools. For similar reasons it is believed that a school of this character cannot be successfully affiliated with any private college. It might well be located in proximity to a State normal school, and be under the same general management, but if its distinctive character is to be preserved it should have separate provisions for class work, laboratory work and dormitories.

B. THE SMALL HIGH SCHOOLS OF MASSACHUSETTS.

The small high schools of Massachusetts constitute a peculiar and important field for constructive effort on the part of the Board of Education. Some of these schools receive aid directly from State funds. A large proportion of them are located in towns which are assisted by the income of the Massachusetts

school fund and by appropriations made for the purpose of aiding and paying the salaries of superintendents.

There were, in 1912-13, in Massachusetts 143 high schools that may be appropriately described as small high schools. Of these, 34 having a total of 1,072 pupils had only 2 teachers each; 41 having a total of 2,292 pupils had only 3 teachers each; 34 having a total of 2,617 pupils had 4 teachers each; 34 having a total of 3,898 pupils had 5 or 6 teachers each. These small high schools present a series of problems from the standpoint of efficient education not experienced by the larger high schools of the State, due in part to the limited teaching force available and partly to the variety of educational needs which they are ambitious to meet. In their respective communities these schools are educational agencies of the utmost importance, but because of their limitations they still adhere largely to traditional courses of instruction and to traditional methods of teaching. Their teachers are frequently young, and have had relatively little teaching experience. While fairly proficient in knowledge of the subjects which they teach, many have had little or no opportunity to learn the best methods of teaching.

The authorities in charge of these small high schools are usually willing and eager to receive suggestions and other assistance from the State Board. The Board has for many years inspected them with a view to accrediting their approved graduates for admission to the State normal schools without examination. The agents of the Board of Education are now making systematic efforts to effect such readjustments of aims, studies and methods of instructions in these schools as will render them more efficient educational agencies for their communities.

The needs and possibilities of these schools must be considered in the light of the conditions and current tendencies in the theory and practice of secondary education throughout the country as a whole. The last quarter of a century has witnessed an enormous growth in the high schools of the United States. New levels of population are being reached by them. New demands are being made upon them. But the high schools and other secondary schools are still far from meeting the valid demands made by the public for an effective

education of a large majority of the boys and girls who attend them. This is generally admitted. A large amount of attention and energy are now being given to the study of the problems of secondary education, and many tentative conclusions of a valuable nature have already been reached.

For these reasons, therefore, chief emphasis is laid in this preliminary report dealing with this subject on certain general considerations regarding secondary education in the country as a whole, including current criticisms of the same and proposals now being considered for its improvement. Since the small high schools are greatly affected by their relations to the higher institutions of learning, consideration has also been given to college admission requirements in general and to proposals now pending as to certain modifications of these in Massachusetts. The report also describes the necessary limitations of small high schools, and specific plans now proposed by the Board for their improvement. Certain statistical data and facts showing what has been accomplished during the past year are appended.

The term "secondary education," as used throughout this report, includes all forms of education given in or under the auspices of schools which are adapted to young people of approximately fourteen to eighteen years of age, whose physical and mental powers are normal, and whose previous schooling has been at least equal to that obtained by an average young person fourteen years of age. Secondary education, therefore, includes both the education given by public and private high schools, as these now exist, and, also, the education given in vocational schools and courses, such as trade schools, agricultural schools, commercial schools and schools of home-making. The term covers, also, all organized efforts in schools, such as the directing of athletics, the promoting of literary activities and the fostering of regard for law and order, which are designed to promote physical well-being, to increase general intelligence, and to improve character.

Because the adequate treatment of the several topics considered in this report involves frequent reference to matters of educational theory and practice which cannot yet be concisely and definitely formulated, a certain amount of repetition has

been found necessary. To make clear what is meant by such terms as "vocational education," "educational aims," "practical arts," "social economy," and other similar terms, it has been found desirable to introduce a somewhat extended analysis, and many illustrations, each time that these topics are taken up at different places throughout the report.

I. THE PRESENT SITUATION AS REGARDS SECONDARY EDUCATION IN THE UNITED STATES.

In 1911-12 there were, in the public high schools of the United States, 1,105,000 pupils, and in the private high schools 141,000. More than 90 per cent. of these schools had courses four years in length. Statistics, which include nearly all of these schools, as well as a few other secondary schools not designated as high schools, public and private, show that 980,000 pupils were enrolled in academic courses, 143,000 in commercial courses, 82,000 in technical or manual training courses, 47,000 in household arts courses and 22,000 in agricultural courses. Only 75,000 pupils were reported as definitely enrolled in college preparatory courses as such, — 41,000 in classical courses and 34,000 in scientific courses, — although the actual number of pupils preparing for college is known to be much larger.

Of all the pupils entering secondary schools considerably more than one half remain but one or two years. In public high schools, in 1911-12, 42 per cent. of the pupils were enrolled in the first year's work, 27 per cent. in the second year, 18 per cent. in the third year and 13 per cent. in the fourth year. The corresponding percentages for the private schools were 35, 27, 21 and 17.

The growth of the public high school is one of the most significant facts of recent educational history. In 1889-90 the public high schools of the United States had only 203,000 pupils; in 1911-12 the number was 1,105,000, an increase practically three times as great as the increase of population.

In Massachusetts there were 240 public high schools in 1911-12. These had 65,000 pupils, of whom 32,000 were reported to be in academic courses, 13,000 in commercial courses, 6,000 in manual training courses and 1,100 in household arts

courses. Pupils numbering 5,700 were reported to be in courses called college preparatory, — 3,500 in the classical and 2,200 in the scientific. But of the 8,900 graduates in 1912, 2,000 were reported as prepared for colleges and 1,500 for other higher institutions, such as normal schools. The growth of public high schools in Massachusetts has been, as regards attendance, only slightly less rapid than in other parts of the country. For example, in 1895-96 the total number of high school pupils in the State was 28,000; in 1911-12 it was 65,000.

The rapid growth of the public high school in America has been due to a variety of causes. Standards of well-being on the part of the population have been steadily rising. An increasing proportion of parents now acquire the means wherewith to keep their children in school for a year or more beyond the age of compulsory attendance. The size of families has been diminishing, and parents with fewer children are able to do more for these children in the way of education. The conditions of employment for young people have been changing, with the result that it is much less practicable than formerly for youths under sixteen or seventeen years of age to obtain work of a character leading to advancement and giving opportunities for growth in vocational power. In many commercial occupations and in some trades it is preferred that beginning employees shall be high school graduates, or shall at least have the maturity and general development of young people who have been in a high school for two or more years. Entrance upon many skilled trades is not commonly permitted to youths under sixteen. Recent legislation, restricting in a variety of ways the employment of youths under sixteen, also operates to increase high school attendance.

These causes will probably continue to be effective in even greater degree in the future. Apart from any intrinsic merits which may be possessed by the courses of training offered in secondary schools, these schools are destined steadily to grow. In addition to regular high schools vocational secondary schools are undoubtedly to be extensively developed to train young people for the practice of agriculture, the industries and home-making. These will, like existing commercial schools and

courses, attract large numbers of pupils who would not enter high schools offering only general courses.

Before discussing the general characteristics of the secondary schools of America, it is proper to recall that these schools differ, in certain fundamental respects, from those found in other countries, owing to the peculiar conditions which have surrounded their foundation. No tuition fees are here required on the part of pupils attending the public high schools; elsewhere, small or large tuition fees are charged, except to scholarship holders. American high schools admit only pupils who have completed an elementary course of instruction, by which time they have usually reached the age of fourteen. Secondary schools abroad almost invariably admit pupils who have reached the age of twelve; and in some cases admission at even an earlier age is common. Over 90 per cent. of American high schools have courses four years in length, whereas abroad, courses are commonly six years at least in length and in some cases nine years. Because of these differences the experience of foreign countries in secondary education offers but little guidance for American practice.

As regards organization, courses of instruction, methods of teaching and educational results the great majority of American secondary schools conform to a few well-defined types, the character of which is substantially the same in all the States of the Union. The general high school, offering academic courses only, is found everywhere. In large centers, in addition, well-defined types of manual training or technical high schools and commercial high schools now exist. In many general high schools commercial courses are offered, while in fewer cases manual training, household arts and agricultural courses are found.

The prevailing courses of study are organized with three distinct ends in view: they fit directly for college or other higher institutions of learning; without fitting for college, they give a general secondary education; or they are designed to give certain phases of vocational training or forms of a general education modified through the broad study of so-called vocational subjects.

The studies in the academic courses of high schools can be ranked in the following order, as determined by the numbers of students taking them at any one time: English, algebra, Latin, history, geometry, physics, German, French and chemistry. Other academic subjects frequently found, especially in non-preparatory courses, are physical geography and physiology, while Greek, astronomy and psychology occupy, at present, places of but small and diminishing importance. These academic "studies" or "subjects," for the teaching of which general high schools primarily exist, are made up of carefully organized bodies of knowledge which naturally lend themselves to compact and logical presentation. As commonly presented, these subjects are presented largely in the shape of definitions, generalizations and more or less abstract exercises. The textbooks and manuals from which they are taught in organized form are designed to comprehend in small compass the essential and elemental knowledge supposed to be valuable in these various fields.

Other courses besides the academic are offered in many high schools. Of these, commercial courses have had most extensive development as regards numbers of students. Manual arts or technical courses for boys, household arts courses for girls and agricultural courses are now growing rapidly in popularity. All of these so-called "practical" courses are believed by many persons to give vocational training in some degree, but, as will be shown later, such assumptions are usually but slightly warranted by the facts. But there is a growing disposition to regard them as constituting important features of secondary school programs for those students who are not preparing for college, or who exhibit little interest in the study of foreign languages and the other subjects composing the more abstract academic program of the usual type.

The subjects of study constituting these non-academic courses often resemble, as to the principles controlling their organization and presentation, the historic academic "studies." They are usually bookish in character, and are taught primarily with a view to the intellectual mastery of underlying "principles." Laboratory methods are indeed employed in teaching manual arts, agriculture, household arts and some commercial studies,

but these are more commonly used for the purpose of illustration, and to give a concrete basis for the comprehension of principles, than as a means of giving practical skill or of "learning through doing." The methods of teaching these newer subjects are indeed largely based upon the methods historically developed in teaching Latin, algebra and other similar subjects, thus showing the effects of example and imitation.

Not only are high school curricula in general, therefore, made up of comparatively few subjects, nearly all possessing somewhat similar characteristics as to organization, but the prevailing methods of teaching these subjects also exhibit a relatively fixed and stereotyped character. Almost all the teaching is of an abstract nature; that is, the learner fixes his attention largely upon verbal statements of generalizations, principles and greatly condensed descriptions. These he studies until he is, in turn, able to give satisfactory verbal renderings of them to the instructor, and to sustain a verbal cross-examination as to the extent and quality of the knowledge he has mastered. Such methods characterize especially the teaching of English literature, the foreign languages, mathematics, history and, to a large extent, the sciences. In the teaching of English expression, the sciences and the "practical arts" a moderate amount of "learning through activity or doing" is now theoretically possible, but even here, in many schools, the actual utilization of writing, speaking and laboratory work is often formal, and quite unconnected with the actualities of practical life.

The methods of teaching employed in secondary schools involve a large amount of verbal memorizing. This emphasis has resulted from the constant endeavor of these schools to meet the tests imposed by higher institutions of learning, such tests usually taking the form of written examinations. It is quite probable — although this matter has not yet been made the subject of scientific investigation — that, for pupils naturally possessing unusual capacities for abstract thinking, these methods realize fairly well the educational purposes commonly held in view, even though for a time a graduate so trained will be academic and idealistic in his relations towards the practical affairs of life. The question will later be raised as to whether,

for that large number of pupils whose capacities for abstract thinking are not above the average, these methods are not relatively unprofitable.

High schools now almost uniformly employ as teachers persons who are college graduates. In their college courses they have commonly studied to good advantage the subjects which they later undertake to teach. But only to a slight extent have they, while as yet students, been required to study the art of teaching. In fact, only recently have colleges offered them even partially satisfactory opportunities to do so. When, therefore, these college graduates undertake teaching they quite naturally fall back upon customary methods of organizing classes, assigning work, conducting recitations and of testing the results of study and instruction. They tend to repeat the procedure with which they had themselves become familiar as high school pupils. To some extent they have been influenced by the methods of instruction followed in their own college classes.

In only a few of the institutions of learning from which these high school teachers come are methods of teaching, as such, studied systematically. These teachers have never learned the most effective means of accomplishing predetermined educational results by adapting specific studies to the prevailing requirements and powers of the various groups of pupils whom it is the accepted function of the school to educate. Even in those college departments attended by the largest numbers of students who will probably become high school teachers, there is still much reluctance to establish special courses designed to train prospective teachers to meet the peculiar professional demands to be made upon them. Departments such as those offering courses in Latin, French, German, English, history, physics, chemistry, mathematics, etc., dislike to admit that any vocational purpose should characterize portions of their work; they insist that the courses which they offer are intended primarily for purposes of liberal or general education. Hence, when such courses are taken by persons preparing to teach, recognition is rarely given to special training required to teach such subjects, and no modifications of the work appropriate to this end are made.

The responsibilities for giving adequate professional training to high school teachers have therefore been satisfactorily met only in a few institutions; but rapid developments, especially promoted by college departments of education, are now taking place in this direction, and new and more serviceable standards are being given shape.

In addition to general high schools a few localities have established genuine vocational schools of secondary grade. This form of education and the schools already established must be recognized as constituting a phase of secondary education, although the educational principles which should control in vocational education are as yet obscure, and no general traditions have so far taken shape. But public opinion having accepted as a legitimate function of public secondary education the giving of practical training for vocations, it is probable that the country is on the eve of an extensive development of special schools designed to discharge this function. At present there are available but few trained vocational teachers, while only the most imperfect plans and working instruments wherewith to initiate vocational education have been devised.

Secondary schools in America, as elsewhere, exert profound influences of an indirect nature on the lives of their pupils. The social life of the public coeducational high school, which is the prevailing type, is intensely stimulating. Some of its effects are good, others are undoubtedly bad. From time to time progressive educators are able to turn to good account the social instincts and customs of adolescent high school youths, and to make the resultant activities "function" as sound moral development and training, but no well-tested means and forms of organization to this end have had as yet general acceptance.

The high school also offers great opportunities for affecting the physical well-being of its pupils. The play instincts may be utilized to good ends, or be allowed to take their own unsupervised course. Provision is now frequently made for systematic physical training and instruction in hygiene, although this lies outside the historic province of secondary education. A place certainly exists for organized physical activities, for corrective work and for the maintenance of a healthful environment for study and for enforcing health-promoting conditions

in the work of pupils of high school age; and some secondary schools frankly accept this as one of their functions.

The foregoing statements are believed to describe the dominant characteristics of American secondary education as it has shaped itself in recent years. Many variations from the types given, of course exist. In large centers of population special secondary schools to which the above generalizations do not apply are found. So-called "cosmopolitan" and also rural high schools of special types are to be found which have departed greatly from the established traditions of secondary education. Here and there in all parts of the country are individual schools that are rendering educational service to their communities far in advance of that possible to schools which adhere to the historic standards of secondary education. In Massachusetts itself are found at least a few of these "variant" institutions.

But the statements contained in the following pages, some designed to express prevailing criticisms of secondary education, and others designed to indicate conditions affecting much desired improvements in it, presuppose the general prevalence of the type forms of organization, courses of instruction, subjects of study and methods of teaching briefly described above, and do not undertake to give more than passing recognition to instances of valuable individual developments along new and unusual lines.

II. CRITICISMS OF CONTEMPORARY SECONDARY EDUCATION.

Notwithstanding the seeming popularity of high schools, it is evident to any careful observer that criticism of the results of secondary education is becoming more prevalent, more varied and more insistent. Much of it is indeed vague and pointless, carrying little of constructive suggestion; but it voices a general discontent, and is by no means confined to Massachusetts or even to the United States.

Complaint is seldom made as to the cost of high schools; neither is the once familiar contention heard that the support and control of secondary education is not a proper function for the State. Most communities now readily provide excellent

buildings and good equipment for their high schools. A village, or city even, takes pride in the fact that the local institution has made a satisfactory record in fitting pupils for college. High school teachers and principals occupy good social positions in their communities, and are rarely subject to undue personal or political influences affecting their professional standing.

Criticisms of the public high school are of two types: the first are made by parents, employers and others who have neither the ability nor the opportunity to study secondary schools carefully; criticisms of the second kind are made by educators, students of social economy and others possessing some capacity and opportunity to study adequately the various problems involved.

The complaints made by laymen generally, and by those parents whose children are not being prepared for higher institutions of learning, are most commonly to the effect that high school education is not "practical." Somewhere between the ages of fourteen and eighteen the great majority of American boys and girls must begin work in some calling. Parents desire for their children a wage-earning vocation offering not merely opportunities to earn something, but also training and experience for the practical affairs of adult life. It is quite natural for these parents to expect the school which their children last attended to assist in fitting them for the occupations which they must soon seek. In rural districts as well as in cities, parents are finding it increasingly difficult to give to their children guidance and training towards suitable vocations. Such parents naturally look to the high schools for assistance.

Employers, on the other hand, desire that those whom they employ shall come to them so well trained in general as to become immediately serviceable in the work to which they are assigned. The employer does not usually expect or even desire that the youth whom he thus employs shall have been trained in the details of the work expected of him; what he seeks is suitable equipment in such essentials of service as intellectual power and moral character. He wants the graduate of a high school to be able "to write a decent hand," "to know how to solve common problems in arithmetic" and "to be able to read directions intelligently." More important, he wants him "to be

observant," "to have common sense," "to have real habits of study" and "to show judgment." In another direction he wishes him "to make his employer's interests his own," "to be diligent," "to be above trifling" and "to be honest."

Obviously, many of these demands, both of parents and of employers, cannot be met by secondary schools as now organized. Perhaps some of them could not be met under any conditions. Vocational education of a specific character is indeed now being given for some occupations. Only in a few communities is this given in schools unconnected with general high schools. Relatively few high schools have effective vocational departments. What shall be done to train young persons to be "observant," "studious," to have "common sense" and to manifest other desirable general traits of an intellectual or moral nature is, as yet, a difficult and obscure problem of educational psychology.

Nevertheless, many of the criticisms of parents and other laymen are justified by the results of secondary education as now conducted in the majority of schools. Public high schools especially are as yet far from rendering to their communities the educational service that they should along a number of important lines.

Study of the actual accomplishments and the possibilities of secondary education, in the light of available knowledge of psychology and social economy, has also convinced a large majority of educators and other competent critics that it is easily possible to make our high schools far more useful as educational agencies than they are at present. The growth in attendance and the increasing cost of these schools entail a most pressing obligation on school authorities to take steps at once to improve them wherever possible.

It is necessary clearly to realize at the outset that some of the subjects now included in high school curricula do not as taught, and probably cannot, lead to valuable educational results. Furthermore, the methods employed in teaching other subjects which do possess real value as means of producing culture, the ideals and insight of good citizenship and vocational power often defeat the very purposes alleged to be held in view. Both as regards subjects taught and as to meth-

ods of teaching, the typical high school represents far too much of ancient custom and tradition and far too little of the fruits of modern educational inquiry. Here are valid grounds for criticism of current secondary education; much of which, although coming from a different angle, reveals many of the same defects which are vaguely perceived by parents and employers.

But the more fundamental source of the relative ineffectiveness of current secondary education is found in the character of the aims which control in the choice and organization of the chief subjects of study. When these aims are concrete and specific they do not, in most cases, correspond to demonstrable social utilities; and when they are stated broadly, in general terms expressive of genuine values, they are apt to be vague, indeterminate and not necessarily related to the subjects of study and methods of teaching alleged to realize them.

For example, the clearly defined aims controlling in the study of Latin, as taught in most schools, are to be expressed as the development of certain intellectual powers over, or forms of mastery of, specific phases of Latin as a language. A knowledge of Latin grammar and composition, and capacity to translate a few Latin classics according to standards clearly defined in text-books, constitute these proximate aims. Other clearly perceived aims closely related to the foregoing are based upon the necessity of preparing pupils to pass college entrance examinations. These direct aims govern in organizing the means (books, exercises, order of topics, etc.) of teaching Latin and in determining most effective methods of teaching.

Now it will not be seriously contended that these aims, by and of themselves, represent in their achievement permanently valuable educational results. The knowledge of Latin commonly obtained in high school, considered as an end in itself, is certainly of little worth. Colleges could readily devise other means than examinations in this subject to test the fitness of students to pursue college courses.

The more thoughtful teachers of Latin would be the last to admit that the very concrete and definite aims here stated adequately express the final educational purposes to be kept in view in teaching this subject. The high school as an agency of

liberal education, they will readily agree, exists so to educate its pupils that these shall exhibit in their mature lives the culture, intellectual power, ideals and executive capacity that modern civilization demands; and in some way the study of Latin is doubtless expected to contribute to these larger results. The more fundamental aims controlling in the study of Latin are, therefore, somehow to be based upon the larger social utilities of life. This study should contribute in some manner to the culture, tastes, mental powers and other capacities that are really worth while.

But an examination of educational literature shows that these larger aims are still very vaguely defined, even by the strongest proponents of Latin in secondary education. In many cases these aims, as stated, involve psychological absurdities, having reference to a "faculty" psychology now wholly discredited. The fact is that, by most teachers of Latin, the validity of these more vague aims is still accepted largely on the basis of faith, and is defended by most imperfect kinds of reasoning, based upon the principles of analogy, and of *post hoc ergo propter hoc*. In current educational discussion these vague aims assume many varied forms. The study of Latin, it is asserted, leads to culture; but as the subject is studied, it is not clear as to how this result is achieved, nor to what extent in any given case. Latin studied intensively, it is alleged, trains such so-called mental powers as observation, reasoning, powers of analysis and the like; but we are not told to what extent, nor is it yet known whether specific powers or general powers under these names are meant. It is asserted by some that the study of Latin develops power, in special ways, to comprehend and to use the mother tongue. By others this is as emphatically denied. We do not yet know which contention has most truth. In the light of existing knowledge, therefore, it is certain that the broader aims alleged to be valid for the study of Latin are vague, unsubstantial and often illusory.

Latin is taken here merely as an illustration of the existing conditions as regards controlling aims in secondary education. The position of Latin in this respect does not differ, except, possibly, in degree, from that of the other historic subjects of the curricula. For what demonstrably valid educa-

tional purposes are we teaching algebra to girls? Or ancient history to both boys and girls? Do we know that the aims which control the organization, scope and methods of teaching such studies as physics and chemistry are really defensible? Many of the "newer" subjects are also open to the same criticism. What are the educational ends realized in the study of the commercial subjects as now usually taught? Agriculture is being taught in many high schools to-day through text-books and laboratory illustration; to what real purposes? What are the technical high schools actually trying to accomplish through the special studies which they offer? Have the aims of their courses been any more carefully tested as to their validity than have those of the academic courses?

It is not intended here to raise the question as to the advisability of teaching any or all of the subjects referred to; it is only asserted that, as regards most of them, the high schools of the United States (and elsewhere) are as yet open to just criticism because there are no satisfactory formulations of the purposes controlling in the instruction offered in the name of these subjects, and because secondary school teachers seem to be doing but little to remedy the situation. In the absence of clearly defined and valid aims, obviously the organization of these subjects will be but partially and illy related to genuine social values, methods of teaching them will be necessarily empirical and aimless, and the adaptation of instruction to the varying needs and capacities of different groups of pupils will be ill defined and probably ineffective.

Contrary to beliefs held in some quarters, it must be asserted that current criticism of secondary education as to its aims is not made primarily in the interests of rendering such education more largely vocational in character. It is recognized that in a comprehensive system of secondary schools, opportunities should and will be offered to those pupils who have reached the age and stage of development where necessity or inclination makes desirable some systematic preparation, on their part, for a vocation; that is, to learn, under school conditions, the essentials of practical skill and technical knowledge required by their chosen callings. It is indeed now freely conceded that the State is under no less obligation to give free opportunities for

obtaining vocational training than for acquiring the education which makes for personal culture and good citizenship in general.

No; the real grounds for concern are that our high schools are not, for a large proportion of their pupils, efficient agencies of liberal education; that is, they do not give the culture, the mental discipline and training in the essentials of citizenship which the public has a right to expect that they should give. For these reasons complaint is made that much of contemporary high school education is not adapted to the needs of the age in which we live or to the needs of the boys and girls who, in such large numbers, are seeking educational advantages beyond those provided by elementary schools.

Space is not available here for a discussion of prevailing defects in high school methods of instruction. These methods have become in most high schools formal and mechanical, as is to be expected in view of the artificial and vague purposes controlling the general organization of the materials of instruction. Most subjects are so taught as if the aim were chiefly to prepare pupils for written examinations. The best teachers engage in a never-ending struggle to maintain an active interest in subjects of study which make no effective appeal to the native intellectual interests of their pupils, and the vital "functioning" of which in genuine "social utilities" no one can prove. Many teachers allow such proximate and often quite valueless aims, as the teaching so much subject-matter, to control their efforts. They accomplish results in the case of pupils of average ability and ambition mainly by assigning definite tasks to be written or memorized. Under these conditions methods of teaching readily become stereotyped and perfunctory.

There are, indeed, some pupils who respond to programs of instruction and methods of teaching such as are here described with readiness and power. Conscientious girls, and both boys and girls possessing exceptional capacity for abstract thinking, — that is, for intellectual operations with verbal generalizations and symbols, — usually do fairly well under these conditions. They pursue their assigned tasks with interest, and usually graduate with credit. After graduation they are welcomed by the colleges because they are of the type supposed to

respond most readily and effectively to prevailing methods of college instruction. Indeed, the high school is rarely criticized on behalf of those children — a small minority of all its pupils — who find the courses easy and who are quite certain to pursue college or professional studies after the high school period of their lives. Many of these young people are destined to be thinkers and, perhaps, intellectual leaders. It is on behalf of the large numbers of pupils who do not go to higher institutions, who do not readily respond to historic methods of teaching the formal studies, but who nevertheless possess large possibilities for effective liberal as well as vocational education, and for whose educational interests the public high school should obviously become increasingly responsible, that the criticisms here made apply.

Another phase of the ineffectiveness of public high school education generally is failure adequately to adapt courses of instruction to the needs of the various groups of pupils which these schools admit but do not graduate. A large proportion — often a majority — of the pupils who enter high school do not remain to finish the four years' course. It is probable that with courses as they are usually, a large number of those who remain but one or two years really ought not to remain for four years, either for their own interests or for the interests of society. Their economic condition, their intellectual interests and their capacities to profit from secondary school instruction may be of such a nature that a full high school course would actually profit them too slightly to justify their prolonged attendance. This would be especially true if their time were to be devoted chiefly to the study of such subjects as foreign language, mathematics, ancient history and formal science.

But there is certainly every social justification, if classes can be organized, for giving these young people during the one or two years that they attend high school, the kind and quality of secondary education, liberal or vocational, which will mean most in equipping them for the kind of life which they will probably lead. The capacity of these pupils for the development of cultural interests, civic ideals and vocational powers, *adapted to their economic situation and their native endowments*, is not less than, but rather different from that of their associates who

possess the means and the inclination to remain longer at school. It is a serious defect of existing secondary schools that they do so little for the more effective education of that large number of pupils for whom, it is reasonable to assume, the age of sixteen marks the normal time for their entry on wage-earning callings and the cessation of their attendance on schools demanding their full time. It will hardly be contended that for them one or two years given to the study of algebra, plane geometry, a foreign language and ancient history is educationally profitable.

It will be objected that the school cannot distinguish those of its entering pupils who will probably remain but one or two years from those who will complete the four years' course. But have serious efforts ever yet been made to ascertain these facts? It is probable that ample data could be procured which would aid in indicating how an entering pupil should be advised as to the high school career that would best suit his needs. These data would include previous scholarship records, evidence of intellectual and vocational interests and the economic condition of the home. We have, of course, no right to prescribe one course rather than another for a pupil, except that the school can, as it does now, prevent a pupil from taking courses for which he possesses no ability or is obviously unprepared. Every high school now exercises this form of control, frequently to the extent of denying a pupil admission to the school. It would be equally legitimate for a school to deny admission to certain courses, *e.g.*, the college preparatory, if it is evident that he is not properly equipped to pursue the required work.

But the functions of the high school are best exercised in leading pupils and parents rather than in prescribing what they shall do. The high school should offer as many courses as its facilities permit, each adapted to the needs of definite groups of pupils, taking account of their economic conditions, their special forms of ability and their probable future opportunities. These courses are in the nature of "open doors," into one of which each pupil will be advised to enter according to his apparent aptitudes as nearly as these can be ascertained after careful study. But no door should be closed to a pupil possessing the ability and the desire to enter it, this being an essential

prerequisite in a system of schools organized for the citizens of a democracy. It is entirely possible for a high school system in this way to meet more adequately than at present the educational needs of the great variety of pupils.

The general criticisms of secondary education here summarized under three heads — vague and unsatisfactory aims, poor methods, and inadequate adaptation of courses to varying groups of pupils — include or underlie innumerable specific and detailed criticisms which are being made with ever-increasing frequency. But it is clear that educators generally, and not least high school principals and teachers, are now taking a responsive and constructive attitude toward these criticisms. Formerly they were indifferent or relied upon a stubborn dogmatism in defending the aims and practices which they followed. Now, quite generally, the underlying validity of much of current criticism of high school accomplishments is recognized; and there prevails in many places a spirit of inquiry, a search for a sounder and more scientific theory of secondary education, and the eager study of what appear to be more fruitful means and methods.

III. SOME CONDITIONS AFFECTING THE IMPROVEMENT OF SECONDARY EDUCATION.

Every effort should be made at the present time to devise ways of improving secondary education. It is not difficult to find much to criticize in the actual operations and accomplishments of all large and complex social agencies, such as systems of schools. It is far less easy so to couple criticism with constructive suggestion as to render valuable assistance in modifying and improving these agencies. But it is of the utmost importance that constructive suggestions be made, even though these be necessarily tentative. In the case of secondary education, the time is certainly at hand for making suggestions as freely as possible. This should be done not only because of its growth in importance, but also because it is now possible to apply in some degree scientific methods to a study of the problems involved. It is no longer necessary to depend upon faith and custom for the aims, and "trial and success" for the methods, of secondary education.

It is wholly impracticable and undesirable to effect what is sometimes lightly called a "revolution" in the organization and administration of any form of education. But it is possible to study, with thoroughness and scientific method, the specific aims, methods and results of that education, and on the basis of carefully formulated tentative theories or hypotheses to devise experiments and readjustments which shall look to greater efficiency. Every educator can legitimately, and in greater or less degree, devote himself to forwarding developmental work of this character. It is with this end in view that the following tentative suggestions and proposals are here put forth. It is expected that these proposals will be given application as conditions warrant, in efforts gradually to improve secondary education in Massachusetts. They have already been widely discussed in the educational literature of the country, and have here and there been given recognition in practice.

Of first importance is the establishment of clearer and more comprehensive conceptions as to the valid aims which shall control in the organization of secondary curricula, and of the specific subjects composing these curricula. The most important single recent advance in this regard has been the general acceptance of the idea that education for vocation has a legitimate place in a complete plan for secondary education no less than education for culture and education for citizenship. The high school did not, as originally conceived, educate for vocation, unless in the sense that certain of the linguistic, mathematical and scientific studies were believed to be fundamental to the professional studies later to be undertaken. The historic studies of the high school have been generally conceived as making contributions to general culture and to mental training, the ends probably best covered by the phrase "liberal education." A few educational theorists (who may legitimately be called educational "mystics") have indeed always been ready to assert that ordinary high school studies possess virtues which constitute them the best fundamental preparation for the non-professional vocations also, such as home-making, agriculture and the trades; but this doctrine should now be placed in the museum of discarded educational superstitions and faiths.

The acceptance of the vocational aim in secondary education first appeared in connection with the commercial studies. Later, the public gave hearty support to the establishment of manual training, technical and agricultural high schools in the belief that these would train youths for specific occupations, or at least give essential training therefor. But genuine vocational aims have not actually controlled in these commercial courses, manual arts courses, household arts courses and agricultural courses in secondary schools as regards the choice of the subjects of study, and the means and methods employed in teaching them. The public, and especially parents, have desired that the instruction offered in these schools and courses should actually give vocational training; that is, that in a positive way it should fit boys and girls in part, at least, for the successful pursuit of the occupations suggested by the titles and the alleged purposes of the courses offered.

But the important conclusion is that the public is now entirely willing that the system of secondary education should include vocational schools and courses under public support, and be developed to any desirable or practicable degree for the purposes of vocational education. We are steadily moving towards the time when a complete system of secondary education will include a variety of schools, departments or curricula designed to give young people from fourteen to twenty years of age efficient vocational preparation for a large variety of useful callings.

Another purpose or aim, not directly associated with the historic curriculum of secondary education, which is now receiving much attention is that of "social education," so called, which title comprehends various phases of moral education and training for citizenship. The period in the life of the average boy or girl usually devoted to secondary education — from fourteen to eighteen or nineteen years — offers opportunities for education in the ideals, habits and knowledge that underlie good citizenship not equalled during any other four years of life. It is often asserted, although only in general terms, that the chief aim of high schools as now organized should be, or actually is, education for citizenship. But a careful examination of the programs and of the educational results of these

schools will show that the alleged aim of training for citizenship is not clearly defined and has not been so analyzed as to indicate the procedure by means of which it is to be attained. The social life of the high school, as a miniature community, is intensely active, and good results may follow participation in it. But such results are only occasionally the outcome of conscious and prearranged efforts and co-operation on the part of teachers and other school authorities. The usual high school course of instruction for most pupils includes English literature, some history and a small amount of civics; but it can hardly be contended that these studies, as now taught, make important contributions to a vital education in the ethical, civic and political principles which underlie moral character and good citizenship. The discipline of the school, combined with the personal influence of teachers and principal, may also be important and valuable factors in the development of civic habits and ideals, but the results thus obtained are, under present conditions, due more to accidental circumstances than to purposeful methods of meeting clearly defined ends.

A splendid field for the development of ways and means of more efficient education lies ahead of the American secondary school as regards this broader civic education, here called "social education." In a vague and too often purposeless way some responsibility for it has long been accepted by the high school; but adherence to traditional procedures, coupled with incapacity to devise suitable educational ways and means, has long prevented or retarded the development of instruments and methods adapted to produce in the adolescent the moral habits, civic intelligence and social ideals required as foundations of a high order of citizenship.

But it is clearly possible, once having clearly defined and concrete aims, to devise suitable courses and methods of instruction, systems of training and guidance of personal conduct to achieve the ends here suggested. Certain concrete proposals now being recommended to the smaller high schools of Massachusetts, looking to effective education for citizenship, are described in later pages. At the outset it must, however, be recognized that such a program will require essentially different means and methods of instruction from those that have long

been customary in connection with the teaching of the older subjects.

Another of the valid purposes of secondary education and one which is now alleged to control in high school academic courses is expressed by the comprehensive, but vague and often mystical, word "culture." The actual aimlessness characteristic of much secondary school instruction is due to failure adequately to analyze the meaning of the larger aims supposedly described by this word, and to define the constituent elements of "culture" in such a way as to discover and exhibit their relations to educational practice — that is, to the educational possibilities of adolescent youths on the one hand, and to the bodies of organized knowledge which it has long been the accepted function of the general high school to teach, on the other. Here exists another large opportunity for the constructive study of the aims and accomplishments of secondary education, provided we refuse to be content with vague generalizations and mystical inferences. Culture, as exhibited by the cultivated man, is certainly capable of being defined in terms of persistent interests, pervading sentiments, attractive habits and inspiring ideals. To produce such realities as taste in literature, various forms of art appreciation, refined manners, noble character, fine sympathies and other qualities approved "of good men" offers a field of educational achievement that is surely worth while. It is certainly possible to realize these results through the use of appropriate instruments and methods of an educational character. To this end it is necessary, of course, in connection with education to distinguish between the acquisition of the knowledge, appreciation and ideals that give rise to interests and accomplishments that are in themselves elements of culture, and those other studies or forms of training which give mastery of the keys or instruments whereby access is gained to culture-giving agencies. Knowledge of good literature accompanied by sympathetic appreciation constitute easily recognizable elements of personal culture; but the actual process of learning to read, which is for most people a necessary key to literature, is not necessarily culture-giving in and of itself. The study of Latin as a language is often confounded with the study of Roman literature, to which a knowledge of Latin as

a language is a key. Latin, as ordinarily studied, indeed, by high school pupils who do not pursue it farther in college, may be of questionable value in contributing to a genuine culture, except, perhaps, as it leads to an incidental appreciation of the scope and character of one phase of historic civilization, — a result that could probably be obtained much more expeditiously in other ways. But appreciative contact with the best of Roman, and especially of Greek, literature by those equipped to make such contact easily effective, certainly gives rise to intellectual and æsthetic qualities that may legitimately be described as constituent elements of fine culture.

Few will dispute the assertion that the "culture" of the American citizen of the twentieth century should, in reasonable measure, include a broad and vital insight into the significance of science for contemporary life. Our civilization extends its roots deep into the soil of the past, but its branches and foliage take their shape and color from the achievements of modern scientific spirit and attainment. But it may well be disputed whether, in our programs of secondary education as now organized and administered, we actually draw upon or use in any effective way the materials that will produce genuine appreciation of the place and significance of science in modern life. Certainly, our formalized courses in physics and chemistry, as now taught, rarely lead to such a result. The cause of our failure is of course to be found chiefly in uncertainty as to the real aims which should control in the teaching of science. It is clearly possible for existing high schools to introduce courses designed primarily to give breadth of vision and abiding interest in science and its applications. Courses for this purpose must deal largely with the concrete realities of the contemporary and environing life, and they must not greatly emphasize abstract formulæ, generalizations and principles. Such courses must not be restricted to one or a few of the so-called sciences, as these have been separately organized for purposes of study by specialists. Their organization must be determined largely by the demonstrable interests and capacities of growing boys and girls, as these react on the vital and suggestive features of their environment. They should serve both as a means of giving general information and experience of a realistic

nature, and also of viewing and interpreting these results in a scientific spirit — but a kind of scientific spirit not produced by current high school science teaching.

A course in general science designed to achieve these ends is now being organized in the smaller high schools of Massachusetts. Emphasis must be laid on the point, however, that the conduct of such a course will involve no less radical departures from the traditions of science teaching, as these have become crystallized in the large majority of secondary schools, than are proving necessary in vocational and social education.

It is clear, therefore, that vocational education and social education as well as some phases of education for personal culture establish aims that must be realized largely by means of subject-matter and methods of instruction unlike those heretofore found in academic and "practical arts" courses in high schools. But in connection with the regular and established subjects are also found no less promising opportunities for constructive work in making secondary education more vital. It is urgently necessary to define more concretely the aims of these subjects, and from time to time to test the extent to which these aims are being realized in practice. Such definition will require analysis of the larger aims in terms of the more specific social utilities, *i.e.*, educational values which result, or should result, from such studies. For example, should we teach Latin principally because of the effects of this study on the student's ability to use English? But what, more specifically, do we hope to accomplish in the direction of greater proficiency in the use of English? Do we aim to improve his comprehension of words through the knowledge of roots and sources gleaned in the study of Latin? Is it expected that translation of classics will result in improved capacity to write and speak English? Will the study of Latin grammar lead to readier and greater comprehension of English grammar? The effective use of English involves a multitude of elements, some probably physiological, and some certainly psychological, in their nature; some closely identified with the vital experience of the user, and some affected or even produced by his conscious study of language as a tool. In which of these do we design to control or influence development, through the study of Latin? To

what extent does any given type of exercise or study produce the results expected? These are examples of questions which each progressive teacher of Latin will certainly seek to answer, or to have answered, as adequately as possible, if he holds that a controlling aim in the teaching of Latin is to improve the quality of English expression. On the other hand he may hold that this aim is not a controlling, but only a secondary and even accidental one. In that case he will strive to define, with all possible specification, the results in terms of social values which he thinks should be set in the foreground of the Latin teachers' vision. These values may be summarized in what many hold as the magical formula, "mental discipline." "Mental discipline," however, is a composite conception, and for most practical purposes it is only a phrase. If specific educational values are concealed in it, the Latin teacher should uncover them, define them, show their relation to life, and devise means for realizing them through the use of his "subject." When he has clarified and tested his purposes he will have obtained a sound basis for the study of methods.

Another example: in our high schools, substantially all boys and girls are required to study algebra and geometry. It is evident that the immediate aims held in view in teaching these studies — namely, the meeting of school tests or passing college entrance examinations — do not stand for permanent educational values. But what are the actual and valuable ends to be realized through these abstract mathematical studies? Educational mystification has done its work here also. We find in current educational discussion many theories of a superficial character to the effect that these studies are characterized by certain occult attributes, such as capacity to produce "mental discipline," "better reasoning powers," "comprehension of quantity and form in the abstract," and the like. Algebra and geometry, as secondary school studies, contain elements that are of obvious importance as instruments in a few higher studies and in a limited number of vocations; but does this fact justify the general prescription of these subjects in high school curricula? What possible justification can any high school offer for requiring girl students to take either algebra or geometry as a condition of

graduation? Some women's colleges, it is true, lay great emphasis on mathematical studies, and therefore they insist that entering students shall possess a good equipment wherewith to begin higher mathematics in college. This practice has, probably, no scientific warrant whatever, but it is readily comprehensible, in view both of the conservatism which has always attached to the education (and non-education) of women, and of the comparative recency of the struggle to prove that women are capable of being educated in the higher and more abstruse branches of learning, no less than men. But these supposed needs of the higher education of women constitute no sound reason why high school girls, not preparing for college, should be compelled to study algebra and geometry.

Is there any evidence that the mathematical subjects, as taught, make visible contributions to the culture which is valuable in modern life? Can it be proven that they enhance the development of valuable intellectual qualities? These studies are undoubtedly easy for pupils possessing certain readily recognized forms of native mental endowment; and it chances that modern life puts a premium on just these forms of endowment. Persons of good (but not too good) mathematical ability are, therefore, likely to succeed in life; but to attribute their success to the results of their mathematical studies, unless these are actually employed as tools in some calling, constitutes a fairly obvious case of reasoning according to the principle of *post hoc ergo propter hoc*. Apart from their demonstrable educational uses, algebra and geometry should probably be regarded as studies of value to those pupils who are, or who readily can be, interested in them, and therefore should be entitled to a place in educational programs as fairly high grade diversions. It is, therefore, not unreasonable to require that in the present state of educational knowledge we shall discover and formulate genuine and definite ends wherewith to justify the compulsory study of algebra and geometry as conditions of high school graduation. We can at least place these studies on an elective rather than a prescriptive basis, and we can be honest enough to ascertain and tell the truth as to the limited field of their actual application in cultural and practical life.

History is another subject that has in recent years been assuming greater prominence in secondary education. The aims controlling in its teaching are hardly less vague than those characteristic of Latin and algebra. The belief is prevalent that the study of history should in some way make for the development of the ideals and the insight that underlie good citizenship; but this purpose is yet too ill-defined, either to guide us in the choice of the materials of history that shall be taught or in devising suitable methods of teaching it. It is certainly within the power of constructive educational effort to analyze the qualities peculiar to "good citizenship" and to discover means and methods of instruction which, while perhaps including much of what we call history, shall result in at least some of the habits, ideals and intelligence sought. It is reasonable to expect, indeed, that history in its various aspects will provide useful means to this end if it is employed according to sound principles of method. But as conditions now exist, much time is obviously wasted in discussing methods of teaching history before it is yet clear what are or should be the controlling objects in teaching it.

Almost all the other subjects taught in the secondary school are as yet far from being really effective as educational instruments because of similar uncertainty as to the educational service which they should render. Sound educational science obviously requires that we should know the "social utilities" — the specific forms of culture, civic ideals, vocational power, etc. — which these studies can produce in and for, men and women who, as a result in part of their school education, should serve in the world as cultivated individuals, good citizens and competent workers. Physics, chemistry, English literature, mechanical drawing, French and German are taught largely as ends in themselves and with only remote and vague reference to their possible or probable "functioning" in the larger utilities of life. Doubtless each of these subjects is capable of serving useful purposes in secondary education; but until these are defined and the content of each, as well as the methods of teaching it, are adjusted to the realization of these ends, the present confusion as to organization, and formalism as to methods of teaching, will continue. By making effective de-

mands, teachers can obtain, from sources outside themselves, a considerable degree of help in ascertaining, at least, some valuable ends which should control in the teaching of each subject. If teachers, working in concert, could make such demands, much would be done towards vitalizing secondary education immediately. Scores of college departments are even now ready to respond to such demands. Even now they see here promising fields of educational research.

During recent years the program of secondary education in many high schools has been enriched by the addition of subjects that may roughly be called the "practical arts." These include manual training, drawing, cooking, sewing, gardening or agriculture and the so-called commercial subjects. The teaching of these subjects, also, as has been stated above, has been rendered ineffective and often fruitless by the prevailing uncertainty as to what should be the controlling purposes in teaching them. Patrons of the high school have often assumed that the study of these subjects would give positive vocational power, — that is, that boys taking manual training would thereby lay the foundations for successful artisanship of some kind; that the study of agriculture would lead to success in farming; that the study of cooking and sewing would greatly increase the home-making competency of girls, while the study of the commercial subjects would give valuable equipment toward the commercial occupations.

Educators have usually given only secondary place to vocational aims in the teaching of the "practical arts." These subjects have been organized in abstract and general rather than in concrete and specific ways, and are taught in large measure by formal methods based on memorized text and laboratory exercise. The "practical arts" studies have usually had only partial recognition even in the curricula of schools supposed to be devoted primarily to teaching these subjects. Little effort has been made to insure that their teachers should themselves have had prolonged experience, or be vocationally competent, in the practice of the occupations towards which such studies are supposed to lead. Only occasionally, and perhaps incidentally, have the foundations for specific or genuine vocational power been laid by practical arts studies other

than the commercial; and in many schools even these have actually led to important results only in the minds of those who prefer to live in the land of "make believe." Enthusiastic teachers do at times arouse in their pupils what may rightly be called vocational ideals. Some pupils, after the successful pursuit of the "practical arts" studies, have indeed later followed the callings related to them as a result of the suggestion obtained. But in general, vocational aims not having been defined and given concrete application, the aims that have controlled in the choice of materials of the courses of study, as well as methods of teaching, have been indeterminate, unsubstantial and unproductive. These studies have, therefore, as yet been of no marked vocational significance in programs of secondary education.

Recent experience seems to have demonstrated that efficient vocational education of secondary grade requires a large degree of concentration in the practice and related study of the calling for which training is being given, and close adherence, in processes of training, to the concrete practices found in the business world. This means that when the time arrives to teach a youth in a vocational school to be a machinist, a printer, or a farmer, or a girl to be a stenographer or a home-maker, it is necessary that a large part of the learner's time, probably from six to eight hours of each working day, should be given to the practice of the actual work characteristic of the calling elected and to related technical studies based on such work. Any so-called program of vocational training for a person not already a worker, which involves but four or five hours per week, may prove to be not only ineffective but positively negative and harmful as tending to produce the attitude of the dilettante. It now seems probable that vocational schools and courses, as parts of a general scheme of secondary education must be organized somewhat apart from schools of general education, and must be administered with especial reference to the requirements of the specific occupations for which they give training.

But there will certainly remain a place, and probably a large and important place, for the so-called practical arts in general secondary education. A satisfactory program of general or

liberal education ought to offer opportunities for the development of the insight into modern economic processes which comes through study of those processes and participation in them in the spirit of the amateur which is easily possible to high school students. The boy who has had the opportunity to do some gardening, and to study the possible applications of science to agriculture, will be a more liberally educated man and a better citizen because of that experience. A girl may not be made conspicuously more efficient as a homemaker by three or five hours' weekly instruction in the household arts; but if the course is sufficiently broad and realistic she can, through it, be made capable of rising to higher levels as a "consumer;" she can be made to appreciate the better standards that are available in homemaking, and she may be inspired to equip herself thoroughly therefor. It is not difficult to conceive possible uses for any or all phases of "practical arts" as means of genuine liberal education, especially for youths whose interests and capacities lie in these directions; but the responsibility lies with educators for clearly defining these aims preliminary to a formulation of means and methods of realizing them.

The largest problem, then, which is still to be solved in much of secondary education is that of defining controlling aims in terms of genuine and demonstrable utilities. The most elementary analysis of these utilities will show that they fall into certain large groups such as those pertaining respectively to physical well-being, to vocational capacity, to useful citizenship, to personal culture and to the "disciplined mind." Certain intellectual tools, such as reading and writing, must be employed very generally; others, such as drawing, mathematics and foreign language have only specific and limited possibilities of application.

To the production of the numberless social utilities, material and spiritual, required in modern life as powers and capacities in the individual, various forms of education, besides those offered in schools, contribute in greater or less degree, sometimes positively, sometimes negatively. The home, the church, the workshop, the playground, the police power, the press, the stage, the library, the voluntary club, — all these are

educational agencies as well as the school. The public school should not undertake to accomplish in education what these agencies — which are in the main private, and only remotely controlled by the State — can do fairly well of themselves. The school as an educational agency must do what these agencies cannot or will not do for positive education, this being peculiarly the mission of the public school because it is created by, and is responsible to, the State; that is, to all society, in a given State or local community, acting collectively.

Under each of the foregoing broad divisions, namely, physical education, vocational education, social education, cultural education and education in the use of intellectual tools and in the formation of useful intellectual habits, the promoters of secondary school education must discover a variety of social utilities which are to be realized by educational means, and which it is desirable and possible for the school to produce, rather than any other educational agency. The ends must be described so concretely and with so little of general haziness that they may constitute satisfactory aims for definite programs of school work. The educator in making the programs of secondary school education for the future, must cease to depend solely or even chiefly upon traditional aims and traditional practices for guidance; he must study modern social economy to find valid aims for his work; and he must study a scientific psychology of adolescence to obtain light as to means and methods of realizing his aims.

IV. COLLEGE ENTRANCE REQUIREMENTS AS AFFECTING HIGH SCHOOLS.

An important function of the secondary school is and always has been the preparation of pupils for admission to colleges and other higher institutions of learning. Many private high schools quite generally offer college preparatory courses or courses accepted by colleges as an equivalent, and are naturally solicitous that graduates shall succeed in passing college tests. Under the leadership of the large endowed colleges and the State universities, higher institutions of learning of America have been for upward of half a century steadily advancing their

own standards of instruction. They have sought correspondingly to advance the standards of their admission requirements. This they have sought to accomplish largely by defining in detail the quality and scope of the specific subjects that should be studied by pupils preparing for college. Written examinations have until quite recently, throughout the east, been almost exclusively employed as a means of ascertaining the quality of the pupil's preparation. A system of accrediting secondary schools was developed years ago in western States, under which the formality of an entrance examination has been dispensed with in the case of recommended pupils coming from schools maintaining standards acceptable to the higher institutions. But even under the accrediting system, the scope and character of high school instruction has been determined almost as much in detail as under the system of written examinations.

Obviously, then, the college has had a profound influence in determining not only the aims of secondary school courses, but also the methods of instruction employed. In many respects this influence has been productive of good results, especially as regards the thousands of public high schools established throughout the country during the last half of the nineteenth century. Many of the teachers in these were not college graduates. For a long period these schools did not establish and maintain scholarly standards of any kind. The famous report of the Committee of Ten, of which committee President Eliot was chairman, published in 1893, constituted an important effort to bring order into what was a condition of chaos. Since the issuance of that report, marked improvement has taken place as regards the organization and teaching of the standard subjects of the secondary school program. Such agencies as the College Entrance Examination Board have also made important contributions towards standardizing and improving secondary education. Most of these agencies have tended to give greater definiteness and also, in most cases, fixity of character to the essential features of the system of college entrance requirements now existing. The outcome has been chiefly the elaboration of detailed programs of college admission requirements by the higher institutions of learning throughout the country. These programs provide secondary schools with quite definite objec-

tives, at least as regards the teaching of the historic subjects. One important incidental result of this is now the requirement in many States that high school teachers shall, at least, be college graduates.

But in other directions the influence of the established system of college admission requirements has been less fortunate. Because of the very definiteness of these requirements, especially when administered through the medium of written examinations, ambitious progressive teachers have been discouraged, deterred or even actually prevented from ascertaining the more fundamental educational aims which should control in their teaching. Unimaginative and unprogressive teachers have been content to have their goals clearly defined by the detailed prescriptions of the colleges. Such formal subjects as algebra, Latin, plane geometry, ancient history and the like have preserved their ascendancy in secondary education partly because they can so readily be taught and tested with little or no reference to their more fundamental values.

The influence of the prevailing system of college admission requirements has also been pronounced in preventing the high school from giving due consideration to that large proportion of its pupils who do not complete the usual four years' courses, or who, doing so, do not go to college. Outside of the commercial courses it is exceptional to find American high school programs which present evidence of having been scientifically devised for any other apparent purpose than that of preparation of pupils for higher institutions of learning. This statement holds, notwithstanding the opportunities for election of subjects that now exist in secondary schools, since among the chief subjects from which election can be made few are found that do not conform in their aims, organization, material and methods of instruction with the requirements established for admission to college.

It is by no means certain that these subjects, taught by the methods which have long been customary in preparatory and other secondary schools, constitute in themselves the best or even a satisfactory preparation for higher education. Their possibilities as means of selection, which are distinct from their educational values, are undoubted; that is, pupils who cannot

“get through” them are commonly deemed not to be qualified to pursue college and other higher courses of study advantageously. But it does not follow that other subjects, possessing more tangible educational worth, could not be made to serve equally well as selective agencies. It would be an interesting and valuable work for colleges to undertake to establish, by means of statistical and other scientific data, their contention that a four years’ secondary school course, consisting largely of quite formal studies in foreign language and mathematics, actually lays better foundations for successful college work, and for subsequent success in life, than courses of a different character.

But in the case of pupils obviously not destined to enter higher institutions of learning, programs of so-called liberal education, based largely upon the formal and customary high school subjects, are necessarily of little worth. Let it be repeated that for large numbers of these students, especially those between fourteen and sixteen years of age, vital forms of liberal education may be more essential than specific vocational education. If college admission programs as now administered tend to prevent or retard the establishment and maintenance of instruction well adapted to pupils not going to college, then there exist the most urgent reasons for insisting on modifications and readjustments, even in college admission programs themselves. These considerations apply with redoubled force to small high schools whose supply of teachers is not sufficient to enable them to maintain side by side two entirely separate and unlike programs of instruction.

Secondary education is now going through processes of reorganization. Efforts are being made in many quarters to restate, in more concrete and effective ways, the aims that should prevail. Following new formulations of aim will come a large variety of definite proposals for new organizations of the subject-matter of instruction and for more scientific methods of teaching. But, in all of the proposed readjustments, it must continue, it should continue, to be held to be of the utmost importance that the function of the high school as a preparatory agency to higher institutions of learning shall neither be overlooked nor undervalued. In every community

able to maintain a high school, opportunities should exist for capable and ambitious youths to obtain, if not in its entirety, at least in large measure, preparation for college.

On the other hand, it is of no less importance that college admission standards shall not be of such a nature as unduly to handicap the efforts of high and other secondary schools properly to care for the educational interests of all pupils who attend these schools. In the interests of sound educational policy, higher institutions of learning will be expected, as agencies of public service, so to modify their standards of admission while serving their own educational interests and responsibilities, as to enable high schools to realize the maximum possibilities in developing educational programs most adapted to meet the varied needs for service which they must render.

To this end it is urgently necessary that the colleges shall revise, with the aid of such scientific knowledge as is available, their own entrance requirements, especially so as to determine the actual content and methods of teaching subjects prescribed specifically or as alternatives. Many colleges, for example, insist on a certain number of units of Latin. They should be expected to present evidence of a conclusive nature that the enforcing of this requirement enables them to secure students with best preparation for college work, such results being attributable to the educational as well as to the selective value of this subject. Can the colleges prove that Latin as studied is superior to German or French as a basis for college work? Is there, indeed, any satisfactory evidence that the large majority of college students find indispensable to the pursuit of college courses as now organized preliminary study of any foreign language?

Again, elementary mathematics is almost universally prescribed for purposes of admission to college. It may be contended that pupils who cannot meet, under present conditions, this requirement may not be qualified to pursue college studies. On the other hand, is there evidence of a satisfactory nature that other subjects cannot give preparation equivalent to that obtained through the study of mathematics, except for such college courses as obviously employ mathematics as an instrument of advanced study or in vocational training?

Physics and chemistry, while not as a rule prescribed for admission to college, nevertheless, when accepted as alternatives, must conform in organization and methods of instruction with standards which in recent years have tended to assume definite forms. Is there any satisfactory evidence that, as thus organized, these subjects result in educational values, either for students going to college or others, of superior nature? Similar inquiries should be made in regard to all the other historic subjects.

Is it practicable for higher institutions of learning to state their entrance requirements otherwise than definitely in terms of subjects of study? Is it practicable for them to devise and administer tests whereby to discover students who possess the natural ability and the intellectual powers needed for sound college work, other than through examinations and accrediting based upon prescribed lists of subjects? As is well known, some noteworthy attempts are now being made by such universities as Harvard and Chicago to do these things. Obviously, it is of the greatest importance to secondary education that satisfactory answers shall be found to these questions; and to this end the larger principles involved should be determined. The following propositions are, therefore, submitted for consideration, as suggesting problems for further examination: —

1. It should be assumed that the college and the secondary school are co-ordinate educational agencies affecting the intellectual and vocational development of young people of good attainments, substantially from fourteen to twenty-two years of age, and that both have equal responsibilities to society for the standards and fruitfulness of their work. Consequently, the college and the secondary school will best discharge their responsibilities to society and to the students they educate, through adjusting their educational programs each to the other, neither failing to give due consideration to the responsibilities and possibilities of the other. The secondary school should not continue in a position of tutelage; the phrase "preparatory" school, with its offensive connotations, already being abandoned, should be allowed to fall into disuse; and the college should impose prescriptions only in so far as in doing so it can present

evidence that it is expressing valid social demands for efficient education in both the higher and the lower schools.

2. One of the conditions which will be readily agreed upon between college and secondary school as being essential to the admission of the student to higher studies is the possession by the latter of certain quite definite intellectual tools. For example, ability to read, write and speak English to degrees easily capable of definition underlies successful work in almost all college courses. A requirement in English, therefore, regarded as a necessary tool of instruction, can be quite specifically indicated on behalf of the college, even to the extent of designating the means and methods by which proposed standards in this "subject" can be met. Again, it will readily be agreed that some college courses require, on the part of the student, definite forms of ability to employ mathematics as a tool. Here, again, specific requirements can be indicated and tests devised to ascertain the actual ability of the pupil to do the required work. Similarly, courses offered in some college departments may well presuppose ability to use as tools French or German of a character which the secondary school will find itself in a position to teach. Where such is the case, specific requirements as to ability to read or to write German, or to do both, are perfectly proper ones for detailed prescription on the student seeking entry to such courses.

There are probably but few other of the customary high school subjects, definite proficiency in which is essential to the successful pursuit of standard college courses. Some colleges now prescribe physics or chemistry or other science, but rarely do the college courses subsequently taken employ in definite ways the results of the high school teaching of these subjects. Various phases of history, English literature, biology, etc., are also prescribed by some colleges, but without reference, obviously, to the definite use of the results of such teaching in college courses.

It is, therefore, questionable whether, outside of subjects like the above which have demonstrable functions as instruments in college courses, colleges should, as a matter of helpful educational policy, express their requirements in specific terms of subjects to be studied; and the burden of proof should

always rest with the higher institution that its specific and detailed requirements are justified by the uses to which the training called for is put.

3. There are other standards, however, which secondary schools and colleges can agree upon as indicating the capacity of a student for higher studies, even though at the present time it is somewhat difficult to define them concretely, to devise satisfactory means of testing them, and to indicate the procedures in secondary education by which they are to be produced. These requirements consist of the general intellectual habits, interests and powers which a good average student at eighteen years of age may reasonably be expected to possess as a result of a good secondary school education. There are a variety of habits of study, capacities to use reference material, and abilities to analyze, organize and present data, the possession of which should be regarded as indispensable to the economical and effective pursuit of higher studies. The possession of these qualities on the part of entering students is indeed greatly desired by colleges at the present time; but the assumption that such qualities are to be produced primarily through the study of certain prescribed subjects, under certain definite methods of instruction, is probably wrong and harmful. The secondary school should exercise a large measure of freedom in devising the ways and means by which it can produce these qualities, the college holding the secondary school responsible for their production in general rather than for their manifestation in connection with certain prescribed secondary school studies. By the exercise of proper ingenuity and effort colleges might be able to devise suitable tests for these qualities where they are unwilling to rely upon the record made by the secondary school.

4. Besides possessing the qualities described above, it is desirable and expedient to require that students entering college shall be widely read, well informed, and intellectually interested to a degree that may reasonably be expected of young persons of seventeen or eighteen years of age who have had good educational opportunities. By means of what tests these qualities can readily be ascertained and measured by a college is by no means as yet clear; but secondary schools at their best

can even now guarantee these results. It is certainly an obligation upon the college to discover and apply such tests as may be necessary in such a way as to give the high school a proper field for its own further development. It is obvious that there are many and unlike roads to the educational goals here described. No one study, no one field of reading or inquiry, is indispensable to the equipment of the "well-informed and intellectually interested" man or youth of the modern world. A thousand roads lead to these heights. The college has no justification for approving only one or two of these roads and in closing the rest. The secondary school should not be "cribbed, cabined and confined" because of the preconceptions of committees defining and administering admission requirements.

The formulation of a detailed program of admission requirements based upon the considerations here suggested would probably be difficult at the present time. It is to be hoped that the so-called "new plan" of admission at Harvard may be so administered as to point a way to this end, even though it gives relatively little weight to the decisions arrived at by the secondary schools themselves in the case of individual pupils.

The general acceptance of the principles suggested above would obviously, as soon as methods of administration could be devised, serve two good purposes. In the first place, colleges would be assisted in procuring as students those of assured ability and preparation for their college work. In the second place, the high school would be enabled, probably in large measure, to utilize the same courses and subjects for the instruction of all of its pupils, as well as for that contingent which is making specific preparation for college. Thus the largest amount of freedom would be given to the high schools that is consistent with the maintenance of efficient programs of college preparation.

While it is yet difficult to devise complete schemes of admission requirements based upon the above principles, nevertheless, many adjustments and accommodations are even now feasible. For example, the number of specific prescriptions can be reduced, and as far as practicable confined to those subjects that are obviously necessary for students in college.

Supplementary tests can be devised to ascertain the general intellectual habits and powers of students, and the extent to which they can be characterized as "well informed and intellectually interested." These tests might well be given in fields of study to be suggested by the high schools themselves.

A proposed tentative plan partially to accomplish these ends, as described in subsequent pages, has been submitted by representatives of the Board to the colleges of Massachusetts for consideration. This plan proposes that the colleges and secondary schools shall agree as to specific and detailed admission requirements to the extent of twelve units, these representing substantially three fourths of a complete high school course. The remaining fourth of the pupil's work is to be administered by the high school without reference to admission requirements, the college to accept the record of an approved school in this work as final, which record, it may be mutually agreed upon, shall be higher than that required for graduation. No suggestion has yet been made, however, as to feasible means of testing either a pupil's intellectual powers in general or the character and scope of his general information. The initiative in this regard may properly come from the colleges themselves.

V. GENERAL AND SPECIFIC PROPOSALS FOR THE IMPROVEMENT OF THE SMALL HIGH SCHOOLS OF MASSACHUSETTS.

(a) *Aims proposed for High Schools.*

As stated earlier in this report, the Board of Education is charged, directly and indirectly, with official responsibilities in connection with a large number of public high schools in Massachusetts. Towards all secondary schools in the State the agents of the Board stand in helpful relationship, being frequently consulted as to problems encountered by progressive principals and teachers in seeking to render their work more efficient.

The conditions warrant the Board and its staff in formulating from time to time suggestions and positive proposals, some general and some specific, looking to the improvement of secondary education. These are to be taken, unless otherwise indicated, as contributions to current educational discussion,

and are in part designed to elicit equally definite suggestions and proposals from others having some acquaintance with the problems of secondary education. As circumstances warrant, some of these proposals and suggestions will, after prolonged and careful consideration, be given such shape that they will thereafter express the conditions which are to be accepted and observed by those high schools which come directly under the supervision of the Board.

In all contemplated or pending readjustments of secondary education it is obvious that definite understanding of the aims which should control in the selection of the materials and devices of instruction is of first importance. The aims of an effective system of secondary education must be based primarily upon the principles of a sound social economy, although the fundamental or inherent intellectual and moral qualities of the individual (*i.e.*, his "original nature") will, of course, affect the extent and character of the realization of these aims in any given case. Moreover, it is clear that the actual methods of realizing them must be based upon the principles of individual psychology.

What is the meaning of "social economy," and in what ways are we to derive from it the controlling aims of secondary education? "Social economy," in the sense here employed, embraces all studies and practices the conscious object of which is the promotion of social well-being. It is therefore a very broad field of applied art and science, in which the contributions of unnumbered special arts and sciences find greater or less application. Social economy resembles medicine, agriculture, war, engineering, commerce and other fields of organized effort to the extent that in each of these are applied those results of practical experience and of the various arts and sciences which can be utilized with profit in solving the problems of living soundly and in rendering practice to that end more effective. Its scope is more comprehensive and inclusive than any of these, however. Social economy stands for conceptions of relatively modern development. The phrase "applied sociology" is sometimes used synonymously with it. It implies the recognition of social "values," "worths" or "utilities," the specific character, attainableness and social control of which are to be

progressively realized by methods of a more or less scientific character.

Among the many "social utilities" embraced under social economy are those which are to be achieved through agencies of an educational character. These may be designated by such broad, but unavoidably vague, terms as "culture," "character," "taste," "skill," "judgment," "erudition," "refinement," "industrial efficiency" and "prudence." But through careful study and analysis we find that many social utilities arising from education may be designated more specifically, and hence in a way to render useful service in the making of educational programs. These include such forms of power "to do" as ability to read, to speak German, to draw, to drive horses, to teach; such active qualities or attitudes as love of Shakespearian drama, interest in geological research, good taste in music, humane disposition towards animals, a sense of the hygienic value of exercise, a disposition towards truthfulness; or such easily definable aggregations of specific habits as bodily cleanliness, affable manners, clear enunciation, attentiveness to directions and "good workmanship;" such "functioning" ideals as those leading to loyalty towards employers, self-cultivation through the use of literature, faithfulness in domestic life, efficiency in vocation and conservation of health; and also possessions of organized and remembered knowledge in fields such as early American history, the principles of optics, quadratic equations, table etiquette, religious ceremonials, the geography of the Pacific.

No adequate classification of the social utilities which are to be achieved chiefly through educational procedures has yet been made. Considered objectively as the powers and accomplishments of the individuals composing society, they may roughly be grouped under the five main heads already used in describing possible educational aims, namely, physical education, vocational education, social education, cultural education and education in the use of intellectual tools. As viewed in the psychological composition of the individual they may be classified according as their dominant characteristics consist chiefly of habits, appreciations, knowledge or ideals.

Neither of these systems of classification is final nor in any

sense scientifically accurate. But it is necessary, pending the development of more exact and scientific groupings, to adopt some provisional classification of the social utilities which education should produce, as means of defining, interpreting and directing the activities and influences of various educational agencies. Conscious educational efforts presuppose some analysis and classification of social utilities as ends to be achieved, whether arrived at empirically or as a result of various kinds of deliberate and intelligent effort.

Social utilities are also to be differentiated according to the educational agencies most active in producing them. In modern civilized life the most conspicuous of these agencies in their effects on the adolescent are the home (with its family influences), the school, the church, the workshop (embracing all vocational pursuits other than those connected incidentally with the home), the playground (including street life and association), the club (including volunteer organizations for purposes of sociability), the press, the police power, the stage and the library.

Each of these agencies tends to specialize its educational functions. Some are obviously gaining in the extent and character of the influences which they exert (not always or necessarily wholesome or constructive). The school, the press, the stage and the club are of this class. Other agencies seem to exert less educational influence than formerly, owing to causes for which the advance of civilization is itself often responsible. The shop is not as efficient an agency of vocational education as it once was. The church, it is asserted, reaches fewer people and those less effectively than in former times, although it is noteworthy that young people's societies (clubs) organized under the influence of the church have gained in educational power. The home, which is the parent educational agency, must probably always give up some function as later specialized agencies develop, but its diminishing educational control seems especially conspicuous at the present time in the case of adolescent youth. The public school is, on the other hand, now the most potent of those of the agencies enumerated above which are under direct public control (*i.e.*, the school, the police power and, in cases, the library). Because the public

school is the product of the State (*i.e.*, of all society acting collectively), its educational functions are constantly being added to, and its responsibilities increased. It is being charged with a variety of obviously useful functions which other agencies seem unable to undertake, *e.g.*, instruction in various aspects of hygiene, supervision of play (athletics) and vocational guidance. It is urged to develop corrective or antidotal forms of education to counteract the, at times, unwholesome influences of such agencies as the press, the stage, the club and the playground. When private agencies exercising educational functions prove unable longer to produce satisfactory results, the public school system is expected and directed to add to its historic functions so as to meet the manifest need. For this reason society demands the establishment of public schools to give vocational education. Special schools are created to reinforce the police power. The school becomes a social center for club life. Medical inspection in schools extends indefinitely into fields of health-training formerly left to the home. Systematic moral education will probably soon be developed as a feature of high school instruction.

The best modern philosophy of education (that derived from, and based upon, conceptions of social economy) recognizes, indeed, that the public school is destined to become a unique educational agency because of its public and responsible character. In its entirety, it should include within the sphere of its responsibilities the obligation to exercise any and all educational functions required in civilized society which other agencies cannot or will not exercise effectively. Thus we find regular or special public schools organizing the means necessary to the exercise of such functions as vocational education; correction of delinquency; vocational guidance; the care of very young children deprived of satisfactory home protection; the teaching of athletics and of dancing as factors in physical development; instruction in sex hygiene; the teaching of thrift through instruction and through the actual establishment of savings banks; and numberless others.

But it is also a sound principle of social economy, perhaps not always clearly understood or scrupulously observed at present, that the public school should not undertake to exercise

functions which other agencies can or should discharge effectively, and which, within reasonable limits, society should compel them to undertake. It is, therefore, necessary that educators, in defining and administering the work of the public school, should clearly conceive education in its most comprehensive significance and as capable of being carried on by many agencies, public and private. Furthermore, educators should appreciate the responsibility of the school in vitalizing and harmonizing other educational agencies.

It is in the light of the foregoing principles, then, that the aims of the public high or other secondary school should be defined and given expression in such concrete and specific ways as will guide educators in finding and adapting the means of attaining these aims, such as subjects of study, organizations of environmental conditions, making of appeals, organized channels of suggestion, control of conduct, physical and vocational activities and free reading.

If social economy were already adequately analyzed, and if classifications and valuations of those social utilities which are to be produced by educational agencies were established, then the task of defining desirable and feasible educational aims for secondary schools would be easy. It would then be possible to state these aims, in many instances, otherwise than in terms of the mastery of the customary subjects of study. Even when the name of the subject of study may be accepted as connoting satisfactory aims, it would presumably be possible at all times clearly to indicate the actual educational values inherent in such study. Unfortunately, the available materials of social economy are insufficient for this purpose.

The educator must therefore rely upon his knowledge of social needs in general and his understanding of the educational possibilities of the adolescent, in endeavoring to define educational aims more fundamentally and scientifically than in terms of the standard subjects of study; and, after having accomplished all that is now possible in this direction, he may still be under the necessity of formulating his program of high school instruction largely in terms of English, history, physics, chemistry, biology, German and the other customary subjects. Until more light is available, the content of each of these will

tend to retain its traditional character, even though the worth of this is incapable of being proved. But if the educator has grasped the significance of the modern social economy as expressing ideals and methods of defining, evaluating and producing social utilities, he will find himself making steady progress towards better conditions in such important fields as physical education, social education, cultural education, vocational education and education in the use of intellectual tools. These divisions may be discussed in order.

1. The educator who views the larger responsibilities and possibilities of the high school will clearly see that it has distinct functions in the field of physical education, some of which have had at least partial recognition and acceptance already. A large variety of special aims are now capable of definition in the physical education of adolescents because of advances made in recent years in discovering and defining its possibilities. Through direction of athletics the school may assist in promoting sound bodily development. By means of suitable lectures and special instruction it can acquaint its pupils with many of the important facts of personal hygiene and of community sanitation. Means can be found (through reading, lectures, fixed and moving pictures and personal contact with the right leaders) to develop ideals of physical well-being. The school can so correlate its efforts with those of home and club and playground that the potent possibilities of the fireside, the Boy Scout organization, organized games and the innumerable other activities of these agencies can be reinforced, harmonized, and, where desirable, given higher ideals in affecting physical well-being.

The school can ascertain whether the environment it creates, and its own working conditions, are such as to conserve and promote health in the larger sense. The ventilation and lighting of the school; the length and number of study and recitation periods; the competition of ambitious teachers for the lion's share of the pupil's time and energy; the possible stimulating effects of coeducation and of school clubs, — these are but a few of the many factors in high school education as broadly conceived which require careful examination and perhaps re-

adjustment if the legitimate demands of modern society for effective physical education are to be realized.

Obviously, few if any of the historic high school "subjects of study" satisfy these needs. These aims require new "subjects" and other instrumentalities of a nature indefinitely flexible and yet purposeful. Only large schools can as yet employ specialists in physical education. In smaller schools, some teacher, perhaps one who has studied biology, can well be qualified for a portion of this service. When the professional training of teachers for secondary schools shall have become adequately organized, each teacher, while not necessarily trained as an expert in physical education, will undoubtedly have been so trained as to appreciate good conditions in the physical surroundings and concomitants of school work, and to be sensitive to deviations therefrom. Thus all high school teachers can be rendered efficient in preserving and improving conditions affecting the health and in promoting the physical education of their pupils through the demands which they voice.

Only experience and careful study will serve to delimit the proper province of the school in physical education. For example, the school may not be the best agency to give needed instruction in sex hygiene. Medical inspection as an adjunct of the school will usually stop short of curative treatment. On the other hand, the school through its household arts courses may do more than the home in teaching the modern hygiene of nutrition. In teaching industrial hygiene the vocational secondary school may discharge a valuable function which no other agency can handle.

2. What is called "social education" in this report offers, also, an important field of opportunity to the high school. Social education includes moral education and civic education and is intended to designate all forms of organized educational effort, the guiding purposes of which are to produce the habits, appreciations, understanding and ideals which are peculiarly needed for the "group" life of men and women; that is, for their harmonious and co-operative living and working together in the family, in the local community and in the State. Every high school can, and even now does in a measure, minister to the social education of all its pupils. A large variety of special

aims to this end are now clearly capable of development. The high school is itself a community, a miniature society, and means must always be devised whereby it shall operate as an orderly, co-operative and efficient society. Right habits of conduct, as well as sound understanding of each individual's obligations of service to the school and to the larger society of which it is a part, can be cultivated through varied school agencies. Talks and lectures, general reading, rewards and punishments, "self-government," the personal influence of teachers and others, — these are but a few of the concrete means now used and capable of further development in realizing the ends of social education.

But the high school can greatly increase its contributions to "social education." It can give systematic instruction to the end of making clear to each pupil the complex social structure of the community in which he lives. It can, in teaching "community civics," find opportunities for the youth to participate consciously and purposefully in many forms of municipal or town activity. The pupil can be trained to assume a share of responsibility for promoting order, relieving distress, fostering more patriotic sentiments and "upholding the good name of his town."

The high school can also utilize literature and other forms of art as a means of kindling social sentiments and ideals, and giving the latter definite shape. It can employ history in a great variety of ways to enlarge the pupils' social perspective; that is, his acquaintance with great personalities, with political activities, with economic movements and the like. History, too, provides means, if its aims are properly defined, of introducing and guiding the formation of ideals of civic conduct. It may be so used, also, as to lead to the possession of large bodies of knowledge that may later "function" as foundations of the conduct and service expected of the citizen of a democracy.

Few of the historic high school subjects of study now serve as instruments of social education. Those which, like history, literature, elementary economics and civics, are capable of being so utilized are now seldom taught with clear perception of the ends to be achieved, and consequently they fail to

"function." But readjustments of aims and methods to the ends of more effective social education are easily possible.

High school teachers are as yet inadequately equipped to achieve the desirable ends of social education. Rarely do the college courses in which they have gained their principal preparation as teachers make any purposeful contributions to this end. Pedagogical courses not infrequently emphasize the need of social education, but they seldom define its aims and almost never suggest means and methods which can best be employed.

In the future, large high schools will doubtless find and employ specialists in social education, although it is obvious that all teachers, through the influence of their personalities, through the effective demands they make for order and character in their students, and through organized contacts with pupils, as advisers, will be able to accomplish much that cannot be left to any special teacher. Teachers of history and literature will find that, through the redefining of the aims controlling in portions of their work, and especially through the formulation of concrete and definite aims to be best realized through these subjects as mediums, they can contribute largely to the ends of genuine social education. Room will remain for the services of special teachers of "community civics," including under this not only systematic studies but field work and observation of and participation in the social activities of the community.

The small high school, while unable to specialize its teaching to so great a degree, will find compensation in the more intimate personal contact that can be developed between teachers and pupils, and the greater simplicity and accessibility of the community activities which it must use for educational purposes.

3. The high school has always made important contributions to personal culture in kindling and nourishing a variety of intellectual and æsthetic interests which enrich life and make both working and leisure hours sources of growth and profitable enjoyment. The high school can, by better defining its possibilities and specific aims in this field, accomplish much more than it has yet even attempted.

Its courses of instruction in history, literature, science, music

and the plastic arts can be so readjusted as to develop genuine qualities of appreciation and taste, which are the foundations of the intellectual and æsthetic interests referred to above. This is obviously a field wherein the high school program should be indefinitely flexible. Perhaps there are no single intellectual or æsthetic interests which it is reasonable to expect should be developed in all pupils alike. Richness of social life, indeed, will be promoted by the varied rather than the uniform development of these interests. The successful promotion of personal culture in the sense here used must be achieved by quite other means than those commonly associated with the teaching of school subjects where the object is the mastery of principles or the training as to "ability to do" in them. When we teach English composition with a view to training people in the art of writing, or German with the intention of developing ability to read or write German, or science with a view to such mastery of its principles and formulæ as will enable the student to apply these to the practical affairs of life, our object is not the development of personal "culture," so-called. The methods of teaching that result in appreciation must be essentially different from those that result in "ability to do" or executive ability.

Many of the subjects now found in even small high schools are capable of being readjusted so as to make direct and positive contributions to personal culture. It will be necessary, however, to render them less formal in their organization and less stereotyped in methods of presentation. English literature is an example of a subject which, owing to the pressure of college entrance examinations, has probably been largely deprived of its cultural value at the present time. Appreciation is no more developed by the analytical study of literature for examination purposes than other æsthetic interests are promoted by the dissection of plant or animal bodies.

Within the field of literature it is not necessary or desirable that any two high schools should have exactly the same program of studies; neither should it be expected that any two pupils shall have covered precisely the same ground. Variety, not uniformity, should be a characteristic of cultural instruction in literature. Each school should be able to indicate at the

close of each year of its work wherein and to what extent it has found and promoted general cultural interests in its various pupils. Each pupil at the close of his school career should be manifestly possessed of some such interests.

An important phase of cultural or liberal education involves the development of those forms of appreciation, understanding and ideals that connect the individual with the vocational activities of others than himself. In a complex economic world, in which extreme specialization of occupation is the rule, an adequate education in the "humanities" requires that each person should be enabled to comprehend the character of those influences which vitally affect the lives of those about him; and of these influences, vocational pursuits are among the most potent. Furthermore, during adolescence the youth is under compulsion of his own nature and of social custom to take steps looking towards the choice of a life occupation for himself. Forms of cultural education which extend and vivify appreciations as to a variety of occupational fields would greatly aid in the making of these choices. Finally, the development of genuine cultural appreciations and interests of a high order touching the work and products of others leads to valuable "consuming" capacities; that is, powers of utilization on a high social plane, which will generally elevate standards of production as well.

Actual participation, in the spirit and manner of the real amateur in such concrete activities, derived from the vocations of men and women, as lend themselves to school conditions is a sure means of attaining the ends here indicated. High schools especially will find in a variety of so-called "practical arts" subjects — gardening or agriculture, various forms of industrial processes, household arts and the commercial occupations — their opportunities for defining and attaining sound aims in this phase of cultural education. The concrete practices will be extensively supplemented by readings, lectures, picture exhibitions, excursions, exhibitions of products and the like. Vocational guidance of a systematic character will gradually grow out of, or connect with, this phase of education. The foundations for vocational guidance are to be found in the vocational interests and comprehensions that effective cultural education

can, among its other purposes, produce. Many high schools have now the courses required for this purpose. What is needed is a measure of redirection of effort in the light of more effective aims. Even small high schools can easily make partial offerings in this field.

4. Vocational education being also a proper function of secondary education, schools and departments may be expected to develop in great numbers to provide it. Obviously, there may ultimately be as great a variety of vocational schools or departments as there are kinds of occupation or groups of related occupations into which men and women enter. The secondary school system of a populous center may have many such schools or departments; small high schools must restrict themselves to one or two, where they have the means for any. Vocational education cannot be carried on effectively with meager resources. But it is to be expected that agencies will be developed generally which will be able to offer sound preparation for any trade or other occupation for which training can be given in whole or in part in schools and in school shops organized for this purpose.

5. The fifth large grouping of aims appropriate to secondary education includes those forms of specific training and instruction, the outcome of which is clearly defined types of intellectual powers. These obviously include such results of education as ability to write English to some definite degree and type of excellence; ability to read, to write or to speak German or other foreign language; ability to apply the common principles of arithmetic, algebra and geometry to the solution of commercial and industrial problems; a knowledge of the essential facts of geography; and other forms of ability of similar character.

It is evident that some of these may belong more properly under the head of vocational education. The test must be found in the "functioning" of the results of the training. For example, it is often urged that drawing (freehand or mechanical, or both) should be taught in high schools because of its supposed value as a "tool of general use." But specific forms of ability to draw, such as the ability to draft architecture or mechanical plans, to make sketches for use in illustration, or

to produce designs adapted to textile fabrics are primarily valuable in vocations only, and the development of these specific powers should be regarded as the function of vocational education. Under some circumstances the same considerations apply to the teaching of foreign languages, mathematics and the like.

Every high school should include among its aims the development of some of the specific forms of intellectual power discussed above. Education for this purpose should be definite, and the results of particular procedures should be systematically examined with a view to determining the validity and effectiveness of the methods employed. But time should not be expended upon the teaching of "tool" subjects which will probably never be used. To cite an example already referred to, the teaching of algebra to girls is probably a misdirection of effort from this point of view.

Within the five general fields described here, all the valid aims of high school work may be included. The question may be raised as to whether due account has been taken of the necessity of developing in students the intellectual habits and powers indicated in common parlance by such terms as "reasoning power," "discrimination," "sound judgment," "diligence in study," "memory" and the like. It is assumed that these so-called powers are the by-products of sound methods in all forms of education, and that their satisfactory achievement as "ends in themselves" is neither desirable nor practicable.

There can be little doubt that the intelligent pursuit of the aims here set forth, with some special direction of effort on the part of the pupil preparing for college, in accordance with principles to be agreed upon by college and secondary school authorities, will insure ample preparation for higher studies on the part of those pupils capable of profiting thereby.

(b) *Specific Recommendations as to the Work of the Small High School, as a Basis for a Working Program for the Present.*

The Board has issued a bulletin¹ which gives directions for organizing a school, outlines programs and courses, describes methods of reducing the number of recitation divisions per

¹ Programs and schedules for small high schools.

teacher, and the number of subjects to be taught in a year; it also states the principles on which a school should select its subjects and the pupil his courses.

In order to secure conditions under which a teacher can have time in which to prepare for recitations, the following recommendations are made as to the organization of a small high school: —

(a) In a school in which the recitation divisions average 20 or more pupils there should be assigned to no teacher more than four or five recitation divisions.

(b) When the recitation divisions average less than 20 there should be assigned to no teacher more than five or six recitation divisions. But in a two-teacher school, where the recitation divisions are very small, seven recitation divisions (some of them meeting only four periods per week) may be assigned to one teacher, provided that the pupils accomplish in four recitations a week the work ordinarily planned for five recitations a week.

(c) To no teacher should be assigned more than thirty recitations per week. (Thirty-five periods may be assigned when part of the work consists of laboratory or unprepared work.)

(d) To the principal should be assigned periods for supervision.

By offering certain subjects only once in two years, it is possible for a two-teacher high school to conduct a four years' course, such as that given below, without assigning more than six recitation divisions to either teacher. According to this arrangement, physics would be given one year and chemistry the next, the juniors and seniors taking the work together. The algebra would be offered once in two years to first and second year pupils reciting together, and would be followed the next year by geometry for second and third year pupils, and the year after that review mathematics would be offered to juniors and seniors. According to this arrangement, each subject may have five full length recitation periods every week.

First Year.

English.

Foreign language.

Algebra.

Community civics.

General science.

Second Year.

English.	History.
Foreign language.	Biology (or agriculture).
Geometry.	

Third Year.

English.	History.
Foreign language.	Chemistry.
Review mathematics.	

Fourth Year.

English.	History (or Economics).
Foreign language.	Physics.

In addition, it is recommended that a certain amount of time should be given to music and drawing, and, if possible, to physical training.

It is not expected that all schools will select the same subjects. The following considerations should guide in such selection: —

(a) Subjects of fundamental importance. An important place should be given to subjects of value to those pupils who complete their schooling with the high school; and, moreover, since many pupils do not remain in the high school more than two years, it is desirable to organize the program of the first two years as far as possible with reference to the needs of these pupils.

The following subjects are recommended as of fundamental importance: —

1 English. To develop power in oral and written composition and to develop a taste for good reading.

2 General science. To develop an appreciation of the value of science and to give practice in applying its principles to matters readily brought within the pupil's experience.

3 Community civics. To make for intelligent citizenship.

It should also be noted that: —

Household arts should receive increasing attention in all the schools of Massachusetts.

Mechanical drawing, freehand drawing and shopwork are valuable in developing mechanical and artistic powers, and an appreciation of the significance of productive and constructive activities in contemporary life.

(b) Special needs of the community. Subjects should be included that reveal to boys and girls vocational opportunities in their own communities, and, where practicable, give specific training for one or more callings.

A high school located in an agricultural community should consider the claims of agriculture as a subject of general education.

Where there is a large demand for stenographers and typewriters, a strong commercial department should be considered. Such a department requires the entire attention of one teacher, and this teacher should be a graduate of a higher institution such as Simmons College or Salem Normal School, or should have a good academic foundation supplemented by high-grade commercial instruction. It is also desirable that such a teacher should have had commercial experience.

(c) Qualifications of teachers. When other considerations are not vital, those courses should be selected for which the teachers in the school are best qualified. On the other hand, when there is a change of teachers, the principal and superintendent should ascertain what subjects can be taught best by teachers continuing in the school, and the vacancy should be filled by a candidate prepared to teach the remaining subjects.

(d) Preparation for higher institutions. The State law requires high schools to prepare for normal schools, technical schools and colleges. Even a small high school with two or three teachers may offer a program that prepares for one or more institutions of each of the above types. It is, however, impossible for the smaller high schools to meet the requirements of *all* higher institutions. To meet these requirements the pupil must take English in the first two years and, in addition, make a choice among mathematics, foreign language, natural science, social science (including history) and some form of practical arts (agriculture, commercial subjects, manual training, household arts).

Pupils preparing for a higher institution in addition to courses in English and science in most cases, will elect mathematics and a foreign language. Pupils who do not intend to pursue study beyond the high school should choose their electives on the basis of personal plans, interests and aptitudes. For such pupils the importance of some work in practical arts is emphasized. In anticipation of entrance on a vocation, the

opportunity is offered to gain some knowledge of commercial subjects, household arts, agriculture or manual arts. The kind of practical arts taught in any school, however, should depend upon the needs of that particular school and the industries into which its pupils are most likely to enter; thus in a farming community courses in agriculture would be given prominence; in a town offering opportunity for employment in business offices commercial studies would claim the first place.

The program of the last two years is restricted in its scope, and nearly all of its subjects are planned with particular reference to the entrance requirements of higher institutions. If possible, however, some form of practical arts should be continued throughout the course for the advantage of pupils who are interested in this kind of study and for whom it affords an approach to preparation for life work.

Especial attention should be paid to improving methods of instruction in general science, community civics and household arts. The more formal subjects, such as algebra, Latin, history, chemistry and physics, now usually conform as to subject-matter and methods of teaching to the definitions of the College Entrance Examination Board, and a fairly satisfactory compliance with such standards is obtained even in small high schools. The so-called newer subjects offer exceptional opportunities to apply principles of good teaching and, furthermore, are in an experimental stage of development which requires special direction and guidance of teachers. In teaching these subjects it is not possible to place the same dependence on the text-book as in the case of the more formal subjects. A brief statement of the aims of general science will indicate the character of the work in this subject and show also the demands it makes for training on the part of teachers.

The purpose of general science is to lead the pupil to appreciate science as an interesting field of human knowledge; to comprehend the methods whereby man has gained a mastery over material forces; and to understand the applications and interpretations of science within the range of his material environment. He is also given practice in applying the principles of science to matters readily brought within his own experience. While text-books are desirable, the materials for

this course are chiefly to be secured by observation of natural phenomena and of processes in industry, and by reading in magazines and newspapers. The course is organized in a series of projects or units, each dealing with some topic and requiring observation, experimentation and reading by the pupil. These topics are to be drawn from many sciences. The projects will not necessarily be the same in any two schools, though some will doubtless be generally used. Each school must adapt the course to its material environment. General science of this character is now taught in a number of schools, and is giving such results as to warrant its introduction in all schools.

Another new course is called community civics and is designed to arouse an intelligent interest in the way in which the community is providing for transportation, protection of life and property, care of aged and infirm, recreation, public health, education, etc. Means should be devised to have the pupils participate in activities in and for the community. The teacher herself should take an active interest in community affairs, and those who are to teach this course should be able to secure training in methods of teaching as well as in practical sociology.

Attention is being given to the content, methods of instruction, equipment and standards of courses in practical arts, such as manual training, agriculture, commercial subjects and household arts. The latter subject is so important an element in the training of girls that schools are advised to introduce it wherever possible. The purpose of household arts is to increase interest in homemaking and to give an understanding of the means and methods of advancing the efficiency of the home.

Agriculture is desirable in a school in a farming community. The purpose of this course is to give boys and girls an appreciation of the interrelations of agriculture and science, to develop a love for country life, and to reveal the opportunities now afforded in farming communities and in related occupations and professions. There are several text-books and manuals that may be used as a basis.

It is the purpose of the Board, as the content of each study and methods of instruction are defined, to prepare bulletins which shall be used as guides to the teacher in these studies.

It is intended that these bulletins will, while giving necessary directions, encourage teachers to exercise initiative and resources in selecting material and in organizing it for presentation to the class.

As will appear from data given later in this report, definite progress has been made by the 48 State-aided high schools in conforming to the standards of organization and to the program of studies recommended by the Board of Education. Fewer high schools now have only two teachers; programs have been measurably adjusted to the capacities of teaching forces and better adapted to the needs of pupils; schedules of recitations show a reduction in the average number of subjects per teacher in 16 two-teacher schools from $8\frac{1}{2}$ to $6\frac{2}{3}$, and in 10 three-teacher schools, from 7 to 6; very few recitation periods are less than forty minutes in length.

Eight State-aided high schools are now offering courses in household arts. Thirty-two of these schools are offering commercial subjects; in 5 schools the entire time of one teacher is devoted to this work; in each of the 6 other schools, at least two thirds of one of the teacher's time is available for this purpose.

When it has been found necessary in the case of any school, in order to conform to the standard number of recitations per teacher, to omit certain subjects from the program, the school has been advised to teach only one foreign language, even though such a procedure was not in accordance with the entrance requirements of certain colleges. To teach one foreign language well is as much as should usually be expected of the small high school.

It is a fair conclusion that the smaller high schools of the State are now operating under conditions of organization much more favorable to effective work than has been the case in the past.

While good organization, a reasonable schedule of recitations and a proper program of studies all contribute to the success of the small high school, the teachers are the main factors in determining the kind of service the school renders to the pupils and to the community. The efficiency of these teachers will depend largely on their professional training.

One method of meeting the need of more adequate professional training for attaining these results is through aid, instruction and encouragement to teachers in service.

Among the means employed by the Board to improve teachers in service are conferences at which the program in general of the high school is considered with principals, teachers and superintendents. Conferences are also provided for teachers of some particular subject at which, under the direction of a capable instructor who has had actual experience in this study, the aims, methods and material of the subject are to be discussed. In addition, the agent of the Board in charge of the work of the small high schools in his visits aids and advises teachers and principals on methods of organization, management and instruction.

A number of committees of high school teachers in the State have been organized, each of which is engaged in defining the place and purpose of some particular subject in the high school. It is planned to prepare bulletins based on the conclusions of these committees which shall serve as guides to high school teachers. Agents of the State Board are also co-operating with committees of the National Education Association on the reorganization of secondary education.

Measures should be taken to require that any person entering service as a teacher in the small high school shall possess not only the personal qualities desirable in an instructor of boys and girls of high-school age, but shall have had special training for the work of the secondary school. The plan of certification which went into effect July 1, 1912, by authority of chapter 375 of the Acts of 1911, fixes certain standards of personal fitness and academic and professional equipment to which teachers in State-aided high schools must conform. This requirement of certification not only debars from teaching unfit and incompetent persons, but is also inducing young men and women to make definite preparation for teaching as a calling. There is evidence that, as a result, the quality of instruction in the small high school has improved. Certification is required, however, in only 48 of the high schools of the State; that is, in less than one third of the small high schools, for it is only to these schools that the law applies. The results of the

operation of the plan of certification warrant its extension to all the high schools in towns in superintendency unions, and legislation to accomplish this result is to be submitted by the Board to the Legislature of 1914.

Another condition of efficient instruction in the small high school is that the salaries and opportunities for professional advancement shall be such as not only to attract capable teachers, but also to retain them for a longer term of service than is the rule at present. The principal or teacher who has found his place in a school and community usually gains in power, influence and usefulness with each added year of service. Examples might be cited of certain high schools in Massachusetts which are winning notable success because a definite program and policy have been pursued for a term of years under the guidance and direction of a teaching force in which there have been few changes. It is especially important that there should be a certain permanence in the head of the school.

It is significant that the success of a small high school in retaining competent teachers is usually in proportion to the salaries paid. Most of these schools, however, are not offering the compensation which justifies a capable teacher in remaining. Twelve principals in the 48 State-aided high schools received last year salaries of less than \$900; in only 9 instances were the salaries over \$1,100. Furthermore, there is little prospect in most cases, of increases from year to year.

There are manifest difficulties in the way of a general increase in salaries for high school teachers in the smaller communities where the support of the high school is largely from local taxation, as the burden of taxation now presses heavily on most of these towns. Existing State aid to the towns, as the grant of \$500 to certain high schools, payments to towns in superintendency unions, and from the Massachusetts School fund does not provide adequately for the salaries of high school teachers. It is hoped that some plan of aid to small towns may be devised whereby principals and teachers may be assured of an adequate salary at the outset and of a yearly increase up to a reasonable maximum, provided there is efficient service.

Reference has been made to the legal requirements that the Massachusetts high school shall prepare for higher institutions.

Existing college entrance requirements make it practically impossible for the smaller high school to comply with this law and, at the same time, meet the needs of the great body of its pupils; hence the Board of Education is seeking certain changes in college entrance requirements so as to permit the graduate of the small high school which has such a program of studies as is approved by the Board, to gain admission to college.

While certain colleges are expected to adhere to their present practice as to admission, it is expected that there will be an increase in the number of higher institutions adjusting their entrance requirements to a reasonable program for a small high school.

The Board, in order to make it possible for the small high schools to meet college entrance requirements and, at the same time, to give effectively such a program of studies as is desirable for the great body of the pupils, has submitted for consideration of the colleges of Massachusetts the following plan of entrance requirements: —

*Proposed Plan of Entrance Requirements submitted to Massachusetts Colleges
by the Board of Education.*

1. The record of a candidate for admission under this plan shall show the satisfactory completion of fifteen units of work (or sixteen units, if the college so requires) in a high school approved by the State Board of Education as maintaining satisfactory standards.

“A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.”

“This statement is designed to afford a standard of measurement for the work done in secondary schools. It takes the four-year high school course as a basis and assumes that the length of the school year is from thirty-six to forty weeks; that a period is from forty to sixty minutes in length; and that the study is pursued for four or five periods a week; but, under ordinary circumstances, a satisfactory year's work in any subject cannot be accomplished in less than one hundred and twenty sixty-minute hours or their equivalent. Schools organized on a different basis can nevertheless estimate their work in terms of this unit.”

2. Not more than the eight (or eight and one half) following units shall be prescribed: —

Three in English.

Three in any one foreign language: Latin, German or French.

Two (or two and one half) in mathematics, completed not earlier than the third year.

(It is understood, of course, that any given high school may decide to offer only one foreign language, and that students from such high

school may become candidates for only such degrees as the college sees fit to offer students presenting that language for admission.)

3. Four units shall be selected by the candidate from the following: —

Fourth unit of English.

Fourth unit of a foreign language.

Two or three units of a second foreign language.

One or two additional units of mathematics.

One, two or three units of science.

One, two or three units of history.

4. The three (or four) remaining units shall be accepted, without examination, from any units approved by the State Board and counted by the school toward graduation.

5. Each candidate shall have included in his high school curriculum, work from each of the five following fields: —

English, foreign language, mathematics, science and history or other social science.

6. Each candidate shall have done advanced work in at least two of the above fields, as indicated by the completion of the following number of units: —

Four in English.

Four in Latin.

Three in German or French.

Three in mathematics.

Two in natural science.

Two in social science, including history.

In the meantime the Board, in order that it may be possible to organize the programs of small high schools in accordance with the definition of a small high school as given at the outset of this article, is asking the Legislature to amend section 2 of chapter 42 of the Revised Laws so that the definition of a high school as therein given shall be one whose organization, equipment and instruction comply with standards established by the Board of Education. A copy of the proposed law is given elsewhere.

(c) Statistical Data and Review of Work accomplished in 1912-13 in Small High Schools.

1. *Percentages of Pupils who graduate in Massachusetts High Schools.* — The following statistics show that for the entire State of Massachusetts a high percentage of the pupils who enter high school graduate therefrom; that the percentage in cities is less than the State average; and that the percentage

in towns of less than 5,000 population is greater than the State average. The smaller percentage in the cities is probably due to the fact that there are more opportunities in the cities for the employment of youth of high-school age. The larger percentage in the small towns indicates the importance attached by rural communities to their local high schools.

	In cities.	In towns, population 5,000 or over.	In towns, population less than 5,000.	Total.
Number of pupils admitted September, 1909,	14,522	5,152	2,734	22,408
Number of pupils graduated June, 1913, .	6,119	2,268	1,274	9,681
Percentage who graduated (per cent.), . .	42	44	47	43

The following table shows that one fourth of the high schools in the larger towns, and practically all those in the smaller towns, of Massachusetts, have fewer than seven teachers each. Consequently, the problems of the small high school are vital to the educational interests of a large part of the State.

	In cities.	In towns, population 5,000 or over.	In towns, population less than 5,000.	Total.
Number of high schools with 1 teacher, .	-	-	9	9
Number of high schools with 2 teachers, .	-	-	38	38
Number of high schools with 3 teachers, .	-	3	39	42
Number of high schools with 4 teachers, .	-	1	33	34
Number of high schools with 5 teachers, .	-	6	10	16
Number of high schools with 6 teachers, .	-	7	9	16
Number of high schools with more than 6 teachers,	58	54	4	116
Total,	58	71	142	271

2. *Survey of Conditions in Small High Schools.* — During the year 1912-13 Deputy Commissioner Orr and Agent Kingsley made a study of conditions in small high schools. This survey was conducted by means of personal visits and by a study of statistical information regarding the membership, organization and teaching force in high schools in superintendency unions.

Additional information was secured through the conferences of superintendents and high school teachers described on pages 230 to 232 of this report.

In these schools the following encouraging features were noted:—

(1) A large proportion of the pupils who enter remain to the end of the course, as shown in the table above. The success of some of the schools in this respect is phenomenal.

(2) Pupils in the small high schools are, as a rule, studious, and the teachers are able to become thoroughly acquainted with the powers, limitations and needs of individual pupils.

(3) Teachers and principals are ready and anxious to receive suggestions and to adopt methods for increasing the efficiency of the school.

The following were among the more serious defects found in these schools:—

(1) The schools were found to be handicapped by present college entrance requirements which make it necessary for the school to teach a long prescribed list of subjects because they are required for admission to college. This prevents the schools from offering other subjects which are needed by the boys and girls.

All of the 48 State-aided high schools were offering instruction in both Latin and a modern language, although the classes in Latin were, in many cases, small. In the 21 State-aided schools that had only two teachers last year, 12 offered Latin and French, 1 offered Latin and German and 8 were attempting to teach three languages,—Latin, German and French.

(2) The salaries paid to principals and teachers are so low, and increments in salaries so seldom given for successful teaching, that few principals and teachers of ability remain in the same school for more than two or three years. It is not uncommon to find that the entire teaching staff has changed at the end of a given year.

The average amount paid in salaries to the principals in the 48 State-aided high schools during the year 1912-13 was only \$986; 12 principals received salaries of less than \$900, and only 9 received more than \$1,100.

These low salaries cannot, as a whole, be accounted for on

the ground that the principals were without experience, for only 3 were entirely without experience upon beginning their work in September 1912, and 26 of them had been teaching four or more years.

The frequency of change in the principalships of the small high schools is shown by the fact that in the 48 State-aided high schools 21 principals were not in their present schools during the preceding year, and only seven had been in their present schools for more than the two preceding years.

(3) Some schools have too few teachers for the number of pupils in attendance. There are a number of schools with only two teachers in each of which the number of pupils is considerably in excess of 30, and several schools with only three teachers in which the number of pupils exceeds 50. While it is possible to offer a fair variety of work with only two or three teachers, it should be borne in mind that this variety is sharply limited by the number of teachers in the school. Additional teachers, therefore, should be added as rapidly as the enrollment of a school justifies.

(4) The programs of instruction were in need of revision for the following reasons: —

(a) Teachers were generally required to give instruction in a larger number of subjects than is consistent with good results.

(b) The work of pupils and teachers was fragmentary. Many subjects in which daily recitations should be conducted were assigned only three or four periods per week.

(c) Many recitation periods were too short.

(d) Natural sciences, social sciences and practical arts did not receive their due proportion of attention.

(5) In many schools the equipment was inadequate.

3. *Means for improving the Small High School.* — The Board of Education may assist in the improvement of the small high school by the following means: —

(1) By seeking a revision of college entrance requirements.

(2) By assisting in the revision and simplification of school programs as a remedy for many of the defects mentioned above.

(3) By devising methods for keeping better records. It is important that the record of each pupil should be definite, comprehensive and easily interpreted.

(4) By making such requirements for teachers as will induce the colleges to devote more attention to the training of teachers, both in the subjects to be taught and in the theory and practice of teaching.

(5) By conducting conferences at which the teachers of a given subject will consider in detail the aims, methods and kind of material that should be employed; such conferences should be under the leadership of a teacher who has achieved marked success in adapting his subject to the actual needs of boys and girls of high-school age.

(6) By organizing committees of high school teachers, distributing their reports, and thereby enabling all teachers, especially those new in the service, to learn the consensus of opinion of experienced teachers in the State on matters of fundamental importance. These reports should also indicate the lines in which experimentation and further study are likely to prove most fruitful in the improvement of methods of instruction.

(7) By co-operating with national committees engaged in the reorganization of secondary education. Through such co-operation the schools of Massachusetts will contribute to the work of these committees, and in turn have the benefit of their conclusions.

(8) By offering criticisms and suggestions to individual teachers in connection with visits paid to the school.

(9) By formulating plans whereby, in the event of the enactment of suitable legislation, high schools in towns where the valuation is low may receive sufficient State aid to enable them to pay standard salaries, provide necessary teachers and secure adequate equipment. The education of pupils in these towns is no less important to the State than the education of pupils in towns with a higher property valuation.

A minimum salary schedule for teachers, with stated annual increments for each year of successful experience, is greatly needed. Such a schedule would secure ability and experience in the teaching staff comparable to that found in city high schools. The assurance of salary increments would lead the teacher in the small high school to identify himself with the interests of the town, and to study the local needs.

(10) By co-operating with school committees in securing plans for new buildings that shall embody the best features available at the minimum cost.

4. *Work accomplished during 1912-13.* — (1) Revision of college entrance requirements. The difficulties of the smaller high schools have been presented to each of the colleges in Massachusetts together with a proposed plan for giving relief. After visits to the individual colleges a conference was held on May 1 in which the situation was laid before representatives from the colleges. At this conference a committee was appointed to confer with the Commissioner of Education on the subject of college entrance requirements.

(2) Increasing the number of teachers. The local authorities have furnished funds to increase the number of teachers in several of the schools. There are other schools in which such increases are urgently needed. The following table shows the number of State-aided schools having the number of teachers indicated ¹ in each of the two years: —

	1912-13.	1913-14.
Number of schools with 2 teachers,	21	16
Number of schools with the full time of 2 teachers and the part time of a third teacher.	9	9
Number of schools with 3 teachers,	11	18
Number of schools with the full time of 3 teachers and the part time of a fourth teacher.	2	1
Number of schools with 4 teachers,	3	2
Number of schools with 5 teachers,	1	1
Number of schools with 6 teachers,	1	1
Total State-aided schools,	48	48

(3) Revising and simplifying school programs. A bulletin was issued in May, 1913, on "Programs and Schedules for Smaller High Schools," containing a list of courses from which selection should be made by each school, definitions of these courses and suggestions to guide the school in selecting courses. Sample programs and schedules for schools with 2, 3 and 4 teachers, respectively, were also presented.

¹ In computing the number of teachers in a given school, account has not been taken of the instructor in the agricultural department. At present three of the State-aided schools have such a department, namely, Ashfield, Hadley and Petersham.

Each superintendent in charge of a school receiving the State grant of \$500 was required to submit his program for approval before the close of the school year, and personal conferences were held with many of these superintendents in order to adapt each program to the actual needs of the pupils now in attendance in that school. The results of these co-operative efforts are shown below.

(a) The following statistics from two groups of State-aided schools indicate reductions in the average number of subjects taught by the teachers. They show that a larger number of periods per week are being devoted to those subjects that are retained in the programs, thereby permitting more thorough work. It is desirable that physics and chemistry, in order to provide for laboratory work, should have even more than five periods per week.

	SIXTEEN SCHOOLS HAVING ONLY 2 TEACHERS EACH YEAR.		TEN SCHOOLS HAVING 3 TEACHERS ¹ EACH YEAR.	
	1912-13.	1913-14.	1912-13.	1913-14.
Number of subjects having six or more periods per week, .	3	9	4	10
Number of subjects having five periods per week, .	65	93	62	106
Number of subjects having four periods per week, .	118	101	114	56
Number of subjects having three periods per week, .	76	3	29	3
Number of subjects having two periods per week, .	4	5	2	-
Number of subjects having one period per week, .	3	2	2	4
Total number of subjects,	269	213	213	179
Average number of subjects for each teacher,	8½	6½	7	6

(b) Recitation periods of less than forty minutes have been nearly eliminated in the State-aided high schools.

In the year 1912-13, 9 schools had no recitation periods of standard length, 32 schools had only part of the periods standard length and only 6 schools had all periods of standard length; 1 school failed to furnish statistical data.

(4) Forms for keeping records. A form of card to contain the record of a pupil throughout the high school course has been prepared. For each subject entry is to be made of the number

¹ Chester High School is also a three-teacher school, but statistics for this table are not available from that school.

of periods per week, prepared and unprepared, and the various marks received. The signature of the teacher is also called for, as this should be a matter of record in every school, especially where there is frequent change of teachers. Provision is also made for the entry of the relative rank of the pupil in his class. This rank in conjunction with the mark will make it possible to check up the work of the school for the purposes of certification, and at the same time protect the school from unjust judgment when a pupil known to have had a low rank in his class fails in a higher institution. Moreover, it will enable schools to make progress in interpreting and standardizing their own records.

(5) Conferences for teachers. Conferences held in the school year, 1912-13, in which the general aims of the small high school were discussed, and also the conference for instructors in commercial studies held in Salem, Aug. 25-29, 1913, are described on pages 232 and 233 of this report.

A conference for biology teachers in State-aided high schools was held at Clark College, Dec. 12 and 13, 1913, under the auspices of the Board of Education. James E. Peabody, head of the department of biology, Morris High School, New York City, acted as leader. The program included a study of the details of classroom and laboratory methods, the applications of botany, zoology and physiology to the welfare of man, and a discussion of the problems which the teachers had encountered in their work. School committees in certain cases paid the traveling and hotel expenses incurred by the teachers in attendance. It is intended to hold similar conferences upon certain other high school subjects during the year.

Plans are also being made for a conference of all teachers in State-aided high schools to be held during the first week in September, 1914. Attendance at this conference should be considered a part of the regular work of the teacher, for which he should receive pay, and, if possible, be allowed traveling expenses. This conference is to be organized in departments, each teacher to confine his attention to the consideration of the aims and methods in one subject that he is to teach during the coming year.

(6) Organizing committees of high school teachers. After securing nominations from superintendents of schools, com-

mittees have been organized in natural science, mathematics, social studies, manual training and commercial subjects. Preliminary steps were also taken to form a committee on household arts. Several of these committees have already outlined important investigations.

(7) Co-operation with national committees. Three agents of the Board are serving as chairmen or members of committees of the Commission of the National Education Association on the Reorganization of Secondary Education. Preliminary reports of this commission have been printed and distributed by the United States Bureau of Education, and will undoubtedly be helpful to the teachers of the State.

5. *Status of Commercial Courses in State-aided High Schools.*— In 5 State-aided high schools, namely, Avon, Huntington, Shelburne, Shrewsbury and Wilmington, the equivalent of the entire time of one teacher is devoted to commercial courses, and in 6 schools, namely, Ashland, Medfield, Plainville, Shirley, Southborough and West Newbury, one teacher devotes at least two thirds of her time to such courses; 7 schools are offering two units of commercial subjects, 14 schools are offering one unit, while 16 schools have not included any commercial work in their programs for this year.

Whenever a school attempts to train stenographers and bookkeepers, even if the school is very small, the entire time of one teacher should be devoted to commercial subjects. On the other hand, one or two courses designed to give a general idea of business are valuable in a school in which a fully organized commercial course does not seem feasible or desirable. In the rural high school superficial courses in commercial subjects should not be offered, as such work has a tendency to take pupils away from the country without giving them the training which will make them efficient in the city.

6. *Status of Household Arts in State-aided High Schools.*— Eight State-aided high schools, namely, Edgartown, Hadley, Northfield, Petersham, Rutland, Sandwich, Southborough and Tisbury, are now offering courses in household arts. It is the intention that such courses in high schools shall consist of a study of food, clothing and shelter, with particular reference to the scientific aspects, and that the high school work shall

not be a mere repetition of the "cooking" and "sewing" done in the elementary grades where the chief attention is devoted to the processes.

C. VOCATIONAL EDUCATION.

STATE-AIDED VOCATIONAL EDUCATION.

Massachusetts, in establishing State-aided vocational education, seeks to offer opportunities for trade instruction to the adult skilled worker, to provide courses for the industrial training of youth between the ages of fourteen and sixteen, prior to entrance on a trade and in preparation therefor, and, lastly, has authorized schools for the benefit of minors of from fourteen to sixteen years of age and regularly employed not less than six hours a day.

Legislation for vocational education has in various acts expressed the purpose of the Commonwealth to furnish, at public expense, such facilities for industrial training that the adult workman already engaged in a trade may to some extent perfect himself in his calling; that the boy or girl over fourteen years of age, soon to enter on an industrial occupation, may secure preliminary training; and that the person who, at the close of the compulsory school period, becomes a wage earner, often in an unskilled industry, may continue to receive instruction along lines best adapted to his needs.

In accordance with this legislation, several types of schools have been organized, each intended to serve one of the groups of workers above described.

Evening schools were early established in which trade extension courses were given for the benefit of experienced workmen in skilled industries. Full-time day industrial schools have been organized to give the youth from fourteen to sixteen years of age the advantages of training for his intended trade. The part-time, or continuation, school is intended to serve the large group of young people who leave school and enter on some calling as soon as the law permits.

The types of vocational schools are thus based on the needs of two principal divisions of the wage-earning population, namely, those who are engaged in the skilled industries and those who are desirous of fitting themselves for such employment.

In the table given herewith there will be found a classification of the several vocational schools, a statement of the purpose of each type, the class of people it serves, the kind of instruction given and the age of pupils admitted. References are made to the legislation under which each school is maintained.

Opportunities provided beyond the compulsory school age (fourteen to sixteen) to further the vocational aim of education.

IN DAY SCHOOLS FOR BOYS AND GIRLS.			IN EVENING SCHOOLS —	
EXTENSION AND PREPARATORY COURSES WITH RELATED WORK.			FOR MEN AND WOMEN.	FOR WOMEN.
In continuation schools (chapter 805, 1913) at least four hours per week.	In part-time schools (chapter 471, 1911) various hours.	In full-time schools (chapter 471, 1911, and special acts) six to eight hours per day.	EXTENSION COURSES WITH RELATED WORK.	PREPARATORY COURSES WITH RELATED WORK.
In industrial schools (chapter 471, 1911) usually four hours per week (2 evenings).	In practical arts schools (chapter 106, 1912) usually four hours per week (2 evenings).			
Trade instruction. Household arts instruction (home making).	Trade instruction. Agricultural instruction (in department of high school or special school). Household arts instruction (home making).	Trade instruction. Agricultural instruction (in department of high school or special school). Household arts instruction (home making).	Trade instruction. Household arts instruction (home making).	Trade instruction. Household arts instruction (home making).
14 → 16	14 → 25	14 → 25	17 →	17 →
Social (citizenship) and cultural education is given also in all of these schools.			No upper age limit.	No upper age limit.

During any part or all of this time the social (citizenship) and cultural aims of education are furthered by opportunities in the general evening schools.

While the law on State-aided vocational education makes it possible for all communities, with the assistance of the State, to establish and maintain such schools and courses as shall provide facilities for training various groups of persons for immediate service in connection with their callings, such vocational education is now provided only in a relatively small number of cities and towns. As a consequence in a large number of places persons who should attend some form of vocational school are not able to do so by reason of the distance from the nearest school which meets their particular needs. It is, however, a source of satisfaction that there is taking place a steady growth in the number of schools and other centers for vocational education as well as in the quality of instruction offered.

1. *Evening School Courses in Household Arts.*

During the past year definite progress has been made in the establishment of evening schools designed to furnish instruction in household arts to young women, seventeen years of age or older, who are employed during the day, but not necessarily in domestic service or in kindred lines of work.

It should be noted that chapter 106 of the Acts of 1912 removed certain restrictions imposed by former legislation on evening schools giving courses in practical arts, which limited such courses to women engaged in occupations for which these schools gave trade extension courses.

By the provisions of chapter 106 of the Acts of 1912 evening courses in practical arts for women, whether or not engaged in occupation, may be established and maintained by any city or town, the management and control of such classes being vested in the school committee or a board of trustees. As in the case of all forms of State-aided vocational education, the Board of Education defines the standards of instruction, and approves the location, equipment, courses, methods of study, qualifications of teachers, admission of students and expenditures of such schools.

The requirements for admission to these evening classes are that the candidate must be, at least, seventeen years of age and must be employed during the day in a wage-earning occupation or in housework.

The test applied to the instruction is that the members of any course at the end of the series of lessons shall be able to actually do well the kind of work for which the course gives training. Thus, a member of a shirt-waist class, at the close of the term of instruction, must be able to make a shirt-waist.

Other standards for practical arts evening courses, as defined by the Board, are as follows: equipment must be sufficiently ample so that each member of the class shall be kept fully occupied at all times. The equipment must, furthermore, be adapted to work of a practical character; kitchen utensils, for example, must be like those used in cooking for a family. The room where the classes are held must be suitably lighted, heated and ventilated and must, in other respects, furnish conditions favorable to good work.

The program of these schools now consists of a series of short-term units adapted to the specific needs of a group of pupils and sufficiently flexible to permit of certain adjustment in the kind and extent of the work. For example, one of the unit courses consists of three lessons of two hours each on bread making, for a group of women who have just begun to keep house; another of six lessons of two hours each on shirt-waists, for women who though intelligent know but little about sewing; another course is one of three lessons of two hours each on fancy shirt-waists, for persons who already know how to sew.

The members of any one group must have a certain amount of common experience on which the course is to be based, and must be in agreement as to their purposes in taking the course. Persons skilled in sewing and who desire to learn how to make tailored suits could not be successfully taught in the same group with persons who are ignorant of the use of the needle and who wish to make simple one-piece dresses.

No group is expected to average over 15 members. When the membership is larger than this, a teacher cannot give sufficient time to the individual.

The purpose of the practical arts evening courses is to give skill in work under conditions of practical life. Methods of instruction must be such as to attain this result. Approval for reimbursement is conditioned on the practical character of the courses and the capacity and skill acquired by members in doing practical work.

A teacher, to be approved by the Board, must have had some practical experience as a practical worker in the subjects to be taught.

When a large proportion of persons who enroll in a short unit course drop out before the close, it is an indication that there are certain defects in organization or in aim. Such a falling off in membership is to be considered as reflecting on the efficiency of a course.

Classes in practical arts as described above were first opened in October, 1912. During the year 1912-13 these classes were conducted in fifteen centers approved by the Board of Education. The attendance on these courses and the number of unit courses offered at the centers have increased during the current year. Other centers are now asking for State supervision in the hope of securing the approval of the Board of Education on the standards of their work with consequent reimbursement.

In order to test the results of practical arts courses, statistical data are being collected on the history of pupils as far as it relates to the work done in the course and the effect on their skill and efficiency in the field in which instruction was given.

The material thus far obtained in answer to these inquiries does not furnish an adequate basis for judgment on the value of these schools. In time it will be possible to reach conclusions regarding the service of the practical arts courses to the persons in attendance and to the community. Meanwhile, it is generally recognized that instruction of this character has great possibilities in improving standards of living and in promoting efficiency in the home.

The efficiency of these courses is promoted by a clear definition of aims, by exact standards of achievement, and by flexibility of programs whereby unit courses may be offered at any time of year, in any place where the instruction can be given, and to any group of employed women over seventeen years of age. Cooking lessons have been furnished in one community in a factory to factory girls, while in another town instruction of this kind has been given in the home of each girl in attendance on the course.

2. *Home-making Schools.*

The aim of the home-making school is to train girls of fourteen years of age or older in actual management of the home. The pupil in such a school spends a large part of her time in her own home where, under supervision, she learns how to manage a home economically and efficiently, exactly as in agriculture the boy secures his practice on the home farm.

So manifest are the advantages of such co-operation between home and school that, despite many difficulties in organizing and directing the work of pupils performed under widely different conditions, the establishment of such courses is being encouraged. Two schools have made promising beginnings in home training of this character. A definite effort is being made especially to improve the standards of the home work of the pupils. In addition, the course of study is being enriched and a closer relation established between the work of the school and the part the home plays in the life of the community. Pupils in home-making courses not only gain a knowledge of housework but, in some cases, they become competent as home seamstresses and milliners and as assistants in tea houses and in lunch rooms.

Home-making courses are now in operation in the Smith Agricultural School at Northampton, the New Bedford Independent Industrial School, Newton Vocational School, Somerville Vocational School for Girls and the Lowell Independent Industrial School. The enrollment in these courses is steadily increasing.

3. *Continuation Schools.*

Chapter 805 of the Acts of 1913 provides for the establishment and maintenance of continuation schools for the benefit of minors between fourteen and sixteen years of age who are regularly employed at least six hours a day. The time spent by a child in a continuation school is to be reckoned as a part of the time a minor is permitted by law to work.

The above act is permissive, and as yet no municipality has established a continuation school under this legislation.

It is the purpose of the part-time, or continuation, school to

extend in some measure, until the age of sixteen, the education of boys and girls who enter wage-earning callings at the completion of the period of compulsory schooling.

The immediate aims of continuation schools are, first, to train their pupils for good citizenship and to advance their general culture; and, secondly, to promote vocational efficiency by courses closely related to the pupil's practical experience in a trade.

It is probable that continuation schools in most cases will be of the first class, namely, general improvement schools, which enable minors between fourteen and sixteen to prolong their general education and also to discover their special aptitudes. This broad training, including a knowledge of industries and the development of industrial sense, is to be followed by special instruction preparatory to entrance on a skilled calling.

Girls' continuation schools offer courses in household arts and home making. In all these schools the programs should include recreation and entertainment.

Minors who are eligible to attend continuation schools are, on the one hand, those engaged in skilled industries, and, on the other, those in unskilled industries. Members of the first group are to be trained for greater efficiency in the trade in which they are employed or in preparation for another calling. Minors engaged in unskilled industries are to be directed into more remunerative callings and aided in securing employment.

Continuation schools which give trade extension or trade preparatory courses are to be regarded as part-time schools, provided for by chapter 471 of the Acts of 1911.

Teachers in continuation schools should be especially trained for such work. When the courses are vocational, a successful trade experience is an essential part of the teacher's equipment.

Boys should be grouped in classes taught by men, and girls in classes instructed by women. Pupils should be selected for any group, on the ground of common experience and education. Before a continuation school is established, a survey should be made of the needs of the prospective pupils and of the trade opportunities offered in the community. The co-operation of employers is a large element in favor of a school, and is an important factor in promoting its success and usefulness.

The continuation school, by its combination of liberal education and trade instruction, promises to reach a larger number of employed minors than does any other agency in the field of vocational education.

Since one great need of vocational schools in Massachusetts is a supply of trained and equipped teachers, it is highly important that agencies should be established for preparing teachers, and means provided whereby competent teachers may be selected and furnished positions.

A definite plan for accomplishing this end is presented in another part of this report. The proposed plan and a discussion of it will be found on pages 62-67.

During the year definite progress has been made in organizing short unit courses in trade instruction, in evening classes. The so-called "unit" course is planned to meet the needs of workers already engaged in a trade. Instruction in a "unit" course gives the pupil during the time at his command the material he most requires, presented in a manner most likely to benefit the learner. A full account of such unit courses is given in Circular No. 38, issued by the department of vocational education of the Board of Education.

4. *Vocational Agricultural Education.*

Agricultural education in State-aided vocational schools is offered in departments in selected high schools and in independent agricultural schools. The theory upon which part of the work is conducted is that the best results from educational work in agriculture are secured, for pupil and community, when work on the farm is made the basis for study at the school. This work is made concrete by requiring each pupil engaged on the farm to do a carefully planned "home project." All work on this "project" is done under the supervision of the instructor. A major part of the pupil's time in school is spent on "project study" which is related definitely to his "home project."

Departments in high schools present an opportunity whereby pupils in rural schools may fit themselves for occupations connected with the tillage of the soil, the care of domestic animals and other productive work on the farm. Independent agri-

cultural schools, like the two county schools established in 1913, offer this opportunity also to pupils drawn from urban communities. Instructors in both types of schools may become leaders among farmers, and thus not only serve their pupils, but also make the agricultural schools information stations.

D. EDUCATIONAL LEGISLATION.

I. SCHOOL LEGISLATION OF 1913.

Several laws enacted by the General Court of 1913 are of great importance to the progress and efficiency of public education in Massachusetts. Among these acts are: chapter 779, on school attendance and the employment of minors; chapter 831, on the labor of minors; chapter 805, on continuation schools and courses for children; chapter 832, on a retirement system for public school teachers; and chapter 396, on the transportation of pupils to outside high schools.

Chapter 396, on the transportation of pupils resident in towns not maintaining a high school and attending a high school in another town or city, provides that the town where the pupil resides, through its school committee, shall provide such transportation when necessary. The expense of such transportation is not to exceed \$1.50 per week per pupil. Reimbursement in full, or to one half the amount expended, is made to the town by the Commonwealth when certain conditions are met.

Chapter 779, in addition to codifying the various acts on school attendance, on the duties of attendance officers, on truancy and on employment certification, establishes higher requirements of compulsory schooling, and makes certain improvements in the administration of the law.

Chapter 831, on the labor of minors, defines the hours of labor and conditions of employment of minors, and charges the State Board of Labor and Industries with the administration and enforcement of this act.

Chapter 805, providing for the establishment and maintenance of continuation schools, is briefly discussed on pages 156-158 of this report.

Owing to the great interest shown in the retirement act, chapter 832, an account of the retirement system established by this act, is given herewith.

Chapter 832 of the Acts of 1913 marks a distinct advance in the provisions for the retirement of aged teachers from service in the public schools. Chapter 498 of the Acts of 1908, which permitted towns and cities by referendum vote to establish pension systems for their teachers, had proven ineffective, since retirement was not compulsory, and there was, furthermore, some uncertainty as to the payment of pensions, since funds for this purpose were dependent upon annual appropriations by the town or city. Teachers who should have been retired were retained in service because no appropriations were made for pensions. From the teachers' standpoint, the law was unsatisfactory. In 1910 only 6 out of 354 towns and cities had established pension systems, and this number by Jan. 1, 1913, was only 12.

In 1911 a petition asking for the enactment of a teachers' retirement law similar to that of Rhode Island was submitted to the General Court. It appeared, however, that there was no agreement on the scope and character of the pension system desired; consequently, the Legislature asked the Board of Education to investigate the question of the retirement of teachers and to submit recommendations. The Board presented its report on this subject to the Legislature of 1913, and submitted therewith a bill as a basis for legislation. This bill provided for the establishment of a State retirement system for teachers entering the service on or after July 1, 1914, but made no provision for teachers in service prior to that date.

The Board, while recognizing the interests of teachers in service, was not convinced that public sentiment would support a State teachers' pension system, nor was it informed as to the attitude of teachers toward certain principles held by the Board of Education to be fundamental in any pension system. When it was demonstrated that the teachers of the State were prepared to endorse these principles, and when the committee on education of the Legislature referred the bill drawn by the Board of Education, together with one submitted by the Massachusetts Teachers' Federation, to the Board, with the request that a new bill be drawn providing for pensions for all teachers in service on the same basis as for those beginning service on or after July 1, 1914, the Board drafted a bill on those lines which,

with minor changes, was passed by the Legislature. This law makes provision for teachers who are hereafter retired, and protects the interests of the taxpayers.

The main provisions of the law are summarized as follows: —

Membership. — Teachers entering the service of the public schools after July 1, 1914, must become members of the Retirement Association.

Teachers in the service of the public schools prior to July 1, 1914, may become members of the association.

Teachers in the service of the Boston public schools are not eligible to membership. For the purposes of this act, the term "teacher" is defined to include superintendents of schools and teachers in certain State-aided industrial schools.

Management. — The management of the Retirement Association is vested in an executive board, serving without pay, and consisting of the commissioners of the three State departments of insurance, banking and education; three members elected by the members of the Retirement Association, and one person chosen by these six. This board must employ a paid executive secretary, fix the rate of assessment on the annual salaries of members at between 3 and 7 per cent., decide on the annuity tables to be used, and have general charge of the business of the Retirement Association.

Funds. — The teachers' pension act creates the following funds: —

1. *The Expense Fund.* — This fund is provided by yearly appropriations by the Legislature, to meet the current expenses of the association.

2. *An Annuity Fund.* — This fund consists of assessments on salaries of teachers who are members of the Retirement Association. The assessment rate is from 3 to 7 per cent., and is uniform on all teachers at any one time. The rate cannot be changed, except after a prior notice of three months. The minimum annual assessment on any one teacher is \$35, and the maximum, \$100.

3. *The Pension Fund.* — This fund is provided yearly by an appropriation by the Legislature, to meet the obligations of the Commonwealth under the act.

Retirement. — Members may retire, or be retired, with the approval of the Retirement Board, by the school committee, at sixty years of age or thereafter up to the age of seventy.

Members must be retired at the age of seventy. A member, on retirement, receives a life annuity based on his contributions which consist of the amount of his assessments, with compound interest at 3 per cent. A member so retiring receives a pension equal to his annuity. A teacher in service before July 1, 1914, who is a member of the Retirement Association, is guaranteed a retirement allowance of \$300, regardless of the amount of his contributions. The pension for teachers in service before July 1, 1914, and who retire as members of the Retirement Association, is based on the assumption that the act has been in force thirty years; thus the pension of such a teacher would be computed on the basis that the teacher has paid thirty assessments, each equal to the amount yielded by his average salary for the last fifteen years, at the rate of assessment in effect at the time of retirement, and the pension will equal the amount of an annuity that would be purchased by such contributions. A teacher thus retiring under the law will annually receive not less than \$300 nor more than \$1,000 at the age of sixty.

Retirement Allowances. — The total contributions of any teacher are limited to an amount sufficient to produce an annuity of \$500 at the age of sixty. The corresponding pension is \$500. When a teacher continues in service beyond the age of sixty, the amount of pension increases without additional expense to the State because of the decreased expectation of life of the pensioner. A fund which gives an annuity of \$500 at the age of sixty gives an annuity of about \$750 at the age of seventy. Therefore, if the rate of assessment and the salary are sufficiently great, and the term of service of sufficient length, a teacher at the age of seventy may obtain a retirement allowance of nearly \$1,500.

Refund. — In case a teacher dies before becoming eligible to an annuity, his contributions, with compound interest at 3 per cent., are paid to his heirs.

Reimbursement. — The retirement act provides that chapter 498 of the Acts of 1908 shall not hereafter be adopted by towns and cities; that the towns and cities in which it is now in effect may repeal it by referendum vote, and thus require their teachers who wish to receive a pension to become members of the State Retirement System. When a town or city pays

pensions to teachers who retire after July 1, 1914, in accordance with chapter 498 of the Acts of 1908, it is to be reimbursed therefor, but not in excess of the amount any teacher would have received had he been a member of the State system. This reimbursement provision also applies to Boston.

In General. — It has been urged that this act should be so modified as to provide for the payment of a pension proportionate to length of service, in cases of disability. The Board of Education, acting on advice, has decided, inasmuch as disability includes invalidism, and disabling accidents, temporary and permanent, that adequate protection is to be secured only through compulsory disability insurance based on a premium adjusted to the occupational risk of teaching. Disability due to old age and disability due to accident and disease constitute distinctly different fields for insurance. One measure cannot deal adequately with both these plans of pension protection. Funds should be provided for an investigation of the occupational risk of teaching, whereby data can be secured upon which an actuary could determine a premium rate for disability insurance. Probably this rate would be less than that now charged by commercial companies for similar insurance.

The present law for teachers' pensions establishes a system based upon sound principles. President Pritchett of the Carnegie foundation has pronounced the law "the best devised and most carefully drawn measure for teachers' pensions existing in this country." It will be possible to add to the law such additional features as subsequent study may warrant, with confidence that the operation of the law will be both satisfactory and just.

II. PROPOSED LEGISLATION.

The Board of Education submits the bills given herewith to the Legislature of 1914, and asks for their favorable consideration.

In addition to the text of each bill a statement of the reasons for its enactment is given.

PROPOSED ACT RELATIVE TO GRANTING OF DEGREES BY COLLEGES AND
OTHER INSTITUTIONS OF LEARNING.

Be it enacted, etc., as follows:

SECTION 1. Section one of chapter four hundred and eighty-one of the acts of the year nineteen hundred and twelve is hereby amended by striking out the word "January" in the first line, and substituting therefor the word:— November, — and by inserting the word:— following — previous to the word "session," in the fifth line, so that the said section as amended will read as follows:— *Section 1.* On or before the first day of November, a petition described in section six of chapter three of the Revised Laws shall be deposited in the office of the board of education. The board of education shall transmit such petition to the general court during the first week of the following session, together with its recommendation relative thereto.

SECTION 2. This act shall take effect upon its passage.

The change here proposed is rendered necessary by the fact that the law as it stands gives the Board no opportunity to make an adequate investigation of the present work and future prospects of an institution applying for the privilege of granting degrees. As a consequence, the Board finds itself in the position of being required to make recommendations without adequate information upon which to base them. The change proposed would work no hardship upon an institution deserving to receive the privilege of granting degrees.

AN ACT RELATIVE TO THE TENURE AND DISMISSAL OF TEACHERS AND
SUPERINTENDENTS OF PUBLIC SCHOOLS.

Be it enacted, etc., as follows:

SECTION 1. (1) The school committee of a city or town, in electing a teacher who has served in the public schools of its city or town for not less than one year, may, and in electing a teacher after July first, nineteen hundred and fifteen, who has so served for any three consecutive years, shall employ said teacher to serve at the discretion of the school committee subject to the provisions of section two of this act.

(2) The school committee of a city or town which has, prior to July first, nineteen hundred and fourteen, elected teachers in accordance with the provisions of section thirty-two of chapter forty-two of the Revised Laws, and which continues said teachers in service for one year after July first, nineteen hundred and fourteen, shall thereafter employ said teachers to serve at the discretion of the school committee subject to the provisions of section two of this act.

(3) The school committee of a city or town, or the joint committee of

a superintendency union, in electing a superintendent of schools for his first term shall, after July first, nineteen hundred and fourteen, employ such superintendent for a term of three years. The salary of such superintendent shall not be reduced during that term. A superintendent in a superintendency union who fails, during his term of office, to receive a certificate, or a renewal of his certificate, as provided by chapter two hundred and fifteen of the acts of the year nineteen hundred and four, shall, upon the expiration of his certificate, thereby vacate his office. A superintendent employed as provided in this section, may be dismissed from office by a two-thirds vote of the full membership of the school committee, or of the joint committee of a superintendency union, whereupon his salary shall cease.

(4) The school committee of a city or town, or the joint committee of a superintendency union, in electing a superintendent who has served as such in the public schools of said city or town, or in said superintendency union, for any three consecutive years shall, after July first, nineteen hundred and fifteen, employ said superintendent to serve at the discretion of the school committee or joint committee, subject to the provisions of section two of this act.

SECTION 2. (1) The school committee may dismiss any teacher from employment by a majority vote of the whole committee, and such teacher shall receive no compensation for service rendered after such dismissal: *provided*, that a teacher employed to serve at the discretion of the school committee as provided in section one of this act shall not be dismissed unless, not less than ninety days prior to the meeting (exclusive of customary vacation periods) at which the committee votes upon the question of his dismissal, he shall have been given notice in writing of the intention of the school committee to vote upon the question of his dismissal; unless also, within ten days after his request therefor, to be made within sixty days after the giving of said notice, he shall have been given a written statement by the school committee of the reasons for which his dismissal is proposed; and unless, also, the superintendent of schools shall have filed with the school committee in writing his recommendations as to the proposed dismissal.

(2) The school committee of any city or town, or the joint committee of any superintendency union, may by a majority vote of its full membership dismiss from its employment a superintendent employed to serve at the discretion of the school committee or joint committee, as provided in section one of this act, and he shall receive no compensation for services rendered after such dismissal: *provided*, that a superintendent so employed shall not be dismissed unless, not less than ninety days prior to the meeting (exclusive of customary vacation periods) at which the committee votes upon the question of his dismissal, he shall have been given notice in writing of the intention of the school committee to vote upon the question of his dismissal; and unless also, within ten days after giving his request therefor, to be made within sixty days after the giving of

said notice, he shall have been given a written statement by the school committee of the reasons for which his dismissal is proposed.

SECTION 3. (1) No teacher employed to serve at the discretion of the school committee, as provided in section one of this act, shall suffer a decrease of salary except by a general salary revision affecting equally all teachers of the same salary grade in the town or city.

(2) A superintendent employed to serve at the discretion of the school committee as provided in section one of this act shall suffer no decrease in salary, without his consent, until at least one year after the school committee has voted to reduce the salary of the superintendent of schools.

SECTION 4. Nothing herein contained shall be construed as limiting the right of a school committee or joint committee to suspend a teacher or superintendent guilty of immoral or other conduct unbecoming a teacher; and if the teacher or superintendent so suspended is subsequently dismissed because of such conduct, he shall receive no salary for the period of such suspension.

SECTION 5. Nothing herein contained shall be construed as limiting the right of a school committee to dismiss a teacher when an actual decrease in the number of pupils in the schools of the city or town renders such action advisable.

SECTION 6. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

SECTION 7. This act shall take effect July first, nineteen hundred and fourteen.

In submitting this act relative to the tenure of teachers and superintendents, the Board seeks to provide means whereby occasional acts of injustice against teachers shall be prevented, while at the same time preserving the full authority and responsibility of the school committee in maintaining efficient schools. The proposed act involves the following particulars:—

1. A teacher entering the service of a given town or city for the first time may be elected as under present conditions. This preserves to the school committee ample opportunity to discover the qualifications of the teacher thus elected.

2. A teacher who has served three years in a given community shall, if again elected, be elected to serve at the discretion of the school committee subject to certain specified restrictions. This dispenses with the annual election of experienced and satisfactory teachers. Such re-election is even now commonly a mere matter of form, but is embarrassing to teachers in many cases, opens the way to unmerited dismissal or discontinuance of service and serves no good purpose.

3. A superintendent elected for the first time shall be elected for three years subject to dismissal under certain specified conditions. This provision is made in view of the undoubted fact that a period of three years is commonly required in which the superintendent may demonstrate his capacity to deal with the local school situation. One year is much too short a period for this purpose. School committees should, therefore, in electing a superintendent for the first time exercise great caution, but having elected him should give him full opportunity during three years to demonstrate his capacity.

4. After a superintendent has served for three consecutive years his tenure shall then be like that of the teacher, *i.e.*, at the discretion of the school committee, subject to certain specified restrictions.

5. Teachers and superintendents elected to serve at the discretion of the school committee can be dismissed only after the observance of certain formalities, which are designed, on the one hand, to protect the teacher from injustice, and, on the other, to preserve to the school committee final and full responsibility for the dismissal or retention of a given teacher or superintendent. These restrictions are of such a nature that they will be willingly accepted by a courageous school committee determined to secure good schools and advised by a competent superintendent who understands clearly what constitutes competency in the case of a teacher.

6. The law is not to become effective until July 1, 1915, and school committees and teachers are given ample opportunity to become acquainted with its provisions before being affected by its application.

RESOLVE TO PROVIDE FOR THE CODIFICATION OF THE LAWS RELATING TO
PUBLIC EDUCATION.

Resolved, That the board of education be directed to prepare a codification of all statutes in force relating to public education, and to report the same to the next general court not later than the fifteenth day of January, nineteen hundred and fifteen. The board may also report such changes and amendments in existing laws as in its opinion may be advisable. The board shall receive such sums for necessary expenses in making this codification as may be approved by the governor and council.

The last revision and codification of the laws relating to public instruction was made in 1901. Since then the Board of Education has been reorganized and many changes made in the laws relating to its functions. A large number of amendments have also been made to laws relating to the public schools, superintendency unions, vocational education, transportation of school children, school registers and returns and school attendance. As a result, the school laws are in a state of confusion, and are followed with difficulty by school committees and others charged with their enforcement. A general revision of some existing laws is also needed.

AN ACT TO DEFINE A PUBLIC HIGH SCHOOL.

Be it enacted, etc., as follows:

SECTION 1. Section two of chapter forty-two of the Revised Laws is hereby amended by inserting after the word "shall", in the third line, the words: — unless specifically exempted by the board of education and under conditions to be defined by it, — and by striking out the portion of said section two following the words "high school", in the fourth line, and inserting in place thereof the following: —in accordance with standards of organization, equipment and instruction approved from time to time by the board of education, — so as to read as follows: — *Section 2.* Every city and every town containing, according to the latest census, state or national, five hundred families or householders, shall, unless specifically exempted by the board of education, and any other town may, maintain a high school in accordance with standards of organization, equipment and instruction approved from time to time by the board of education.

SECTION 2. This act shall take effect upon its passage.

The existing laws relating to high schools contain the requirement (section 2, chapter 42 of the Revised Laws) that a public high school shall prepare its pupils for admission to State normal schools, technical schools and colleges.

Lack of uniformity in requirements for admission to technical schools and colleges renders it difficult or impossible for a high school with a small teaching force to comply with the existing law, except at the expense of giving an undue proportion of the time of teachers to the few pupils who are preparing for different higher institutions of learning.

In attempting to provide preparation for higher institutions of collegiate rank, the small high school must often limit its

program to the traditional academic subjects, and, consequently fails to interest many boys and girls and to meet the real needs of the community by which it is maintained.

It is probable that certain colleges will continue to insist on special features in their admission requirements which impose an undue and unreasonable burden on the smaller high schools which attempt to meet such requirements. On the other hand, an increasing number of higher institutions of learning admit pupils on the preparation afforded by general high school courses.

The efficiency of certain small high schools will be advanced if, when local conditions warrant, the Board can approve them as meeting the legal requirement on the town to maintain a high school, even though the program of subjects does not include all required for admission by some colleges and technical schools.

The Board should be given authority to exempt certain communities from maintaining high schools as, in some cases, high school instruction can be provided by sending the children to a high school in a neighboring town or city.

AN ACT RELATIVE TO CERTIFICATION BY THE BOARD OF EDUCATION OF
TEACHERS IN SUPERINTENDENCY UNIONS.

Be it enacted, etc., as follows:

SECTION 1. After July first, nineteen hundred and fifteen, no person shall be eligible to teach in a public school in any town in a superintendency union who does not hold a certificate issued by the board of education, in accordance with section two of this act.

SECTION 2. The board of education shall define the conditions on which teachers' certificates shall be given and held, and shall grant certificates to candidates who are found qualified by examination or otherwise; but any person with a satisfactory record as a teacher for a continuous period of not less than six months in the public schools of this commonwealth shall be entitled to certification under this act, when application therefor is made prior to July first, nineteen hundred and fifteen, but not otherwise.

SECTION 3. The school committee of any town or city not in a superintendency union may require certification, as provided in section two of this act, as condition of eligibility to teach in the public schools of said city or town.

SECTION 4. This act shall take effect upon its passage.

At present no definite requirements of preparation or fitness are imposed by law on teachers in the schools in superintendency unions, except that teachers in State-aided high schools are required to hold certificates from the Board of Education.

The school committees are charged by section 28 of chapter 42 of the Revised Laws to select teachers with due regard to moral character, and to ascertain by examination their qualifications for the instruction and management of a school.

No standards of preparation and fitness for teaching can be put into operation in superintendency unions.

The proposed act will give the Board of Education authority to define such standards and to require candidates for positions as teachers in unions to meet these requirements. Such a law will prevent the appointment of teachers who are manifestly incompetent by reason of personal limitations or inadequate training.

The Board would recognize a certificate of the completion of a course in a Massachusetts normal school as entitling the holder to certification to teach in elementary schools. Further, the act provides that any teacher with a satisfactory record of service for a continuous period of at least six months in the public schools of Massachusetts is entitled to certification, provided application therefor is made prior to July 1, 1915.

Inasmuch as the State contributes toward the salaries of superintendents of schools and teachers in superintendency unions, it is manifestly interested in securing good service. Furthermore, most of the towns in unions receive payment from the income of the Massachusetts school fund.

At present the superintendent of schools in a union is required to hold a certificate, whereas the teachers in these unions, with the exception of those in State-aided high schools, are not required to present evidence from the Board of fitness to teach.

AN ACT TO AUTHORIZE THE APPROPRIATION OF MONEY FOR THE ACQUISITION OF A NEW SITE FOR THE MASSACHUSETTS NORMAL ART SCHOOL.

Be it enacted, etc., as follows:

SECTION 1. That a sum of money not exceeding two hundred and fifty thousand dollars is hereby appropriated, to be paid out of the treasury of the commonwealth, and to be expended under the direction of the

board of education, together with any moneys that may be received as gifts by said board of education, for the taking or purchase of a tract of land as a site for the Massachusetts Normal Art School; but no land shall be so acquired until such site has been approved by the governor and council.

SECTION 2. For the purpose of carrying out the provisions of section one of this act, the board of education may, in the name and behalf of the commonwealth, from time to time, take or acquire by purchase or otherwise, such lands, buildings and rights in land in addition to those already acquired as in its opinion may be necessary to accomplish the purposes of this act. In the event of the taking of any lands, buildings or rights in land by said board of education, the board shall file in the proper registry of deeds a description thereof, sufficiently accurate for identification, with a statement signed by the said board or by a majority thereof, that the same are taken under the provisions of this act, in the name and behalf of the commonwealth; and the said act and time of filing shall be deemed to be the act and time of the taking of such lands, buildings or rights in land and shall be sufficient notice to all persons that the same have been so taken. The title to the lands, buildings and rights in land so taken shall vest absolutely in the commonwealth and its assigns forever. The commonwealth shall pay all damages sustained by any person by reason of any taking under authority of this act. Said board shall estimate the damages for such taking and submit the estimate to the governor and council for approval, and may, with the approval of the governor and council, agree with any such person upon the damages to be paid for such taking. If said damages cannot be so agreed upon, such person may, within two years after the taking, file in the clerk's office of the superior court for the county or counties wherein said lands shall be taken a petition for the determination of the damages, and thereupon the court shall appoint a commission consisting of three disinterested persons to whom the petition shall be referred, and who shall determine the damages and report thereon to the court. Said board shall, upon approval of the governor and council of its estimates of damages, or upon the filing of any determination made by a commission as aforesaid, offer, in behalf of the commonwealth, to pay the person sustaining damages by reason of such taking the amount so estimated or determined, and if such person shall, in accordance with such notice and within one year after being so notified, deliver a satisfactory release of the damages to the board, the board shall certify to the treasurer of the commonwealth the amount to be paid to such person, and the treasurer shall pay the same. Said board or any person whose property is taken under the right of eminent domain, if dissatisfied with any determination of damages made by any commission, may, within one year after the time when such determination is filed in court, file in said court under the number and title of the petition a claim for a trial by jury to determine the damages, and thereupon the damages upon the petition shall be determined by a jury in said court in the same manner as if the petition had come before

a jury for its determination of damages in the first instance. The commissioners shall receive such compensation as may be determined by the court. If, upon hearing by the commissioners or upon trial, damages are increased beyond the amount which the commonwealth offered to pay therefore prior to the appointment of the commission or to the trial, as the case may be, the person sustaining damage by reason of the taking shall recover costs; otherwise such person shall pay costs, and costs shall be taxed as in civil cases.

SECTION 3. This act shall take effect upon its passage.

The Board of Education considers that the unsuitable character of the present site and buildings of the Massachusetts Normal Art School, and the present and probable future needs of this school, warrant it in asking for such legislation as shall enable the Board to secure a tract of land on which buildings and equipment may be provided to meet the developments of the next twenty-five or fifty years. It is contemplated to erect on the site selected the following buildings: an administration building, an applied arts or industrial arts building, a heating and power plant, a dormitory and an industrial arts museum.

A tract suitably located and of sufficient size to permit the proper lighting of these buildings, it is estimated, will cost \$250,000.

This legislation is submitted, after consultation with the Board of Economy and Efficiency.

A full discussion of the present conditions and proposed plans for the Massachusetts Normal Art School is found on pages 45-62 of this report.

AN ACT TO AUTHORIZE THE APPROPRIATION OF MONEY FOR MAKING NECESSARY INVESTIGATIONS AND PROVIDING PLANS AND SPECIFICATIONS IN CONNECTION WITH PROPOSED NEW BUILDINGS FOR THE MASSACHUSETTS NORMAL ART SCHOOL.

Be it enacted, etc., as follows:

SECTION 1. That a sum of money not exceeding five thousand dollars is hereby appropriated, to be paid out of the treasury of the commonwealth and to be expended under the direction of the board of education, for the purposes of making necessary investigations, and of providing necessary plans and specifications in connection with the submission of estimates to the legislature for appropriations relative to the erection of proposed buildings for the Massachusetts Normal Art School.

SECTION 2. This act shall take effect upon its passage.

In view of the proposed change in site of the Massachusetts Normal Art School, and of the probable extension of the work of that institution, it is necessary that a study should be made of buildings and equipment required for the work of this school in the future, and plans and specifications for these buildings should be secured.

The Board of Education asks for a sum not exceeding \$5,000, in order that it may make such investigations and secure plans and specifications.

AN ACT TO PROVIDE FOR THE ESTABLISHMENT AND MAINTENANCE OF
DAY AND EVENING CLASSES IN THE PRACTICAL ARTS FOR WOMEN.

Be it enacted, etc., as follows:

SECTION 1. Chapter one hundred and six of the acts of the year nineteen hundred and twelve is hereby amended by inserting after the word "separate" in the third line the words: — day and; by striking out the words "shall be open to all" in the fifth line and inserting in place of them the words, — the day classes shall be open only to women over sixteen years of age, and the evening classes shall be open only to, — so as to read as follows: — Any city or town may, through its school committee, or other board of trustees for vocational education, establish and maintain separate day and evening classes in household and other practical arts. Such classes shall be known as practical art classes; the day classes shall be open only to women over sixteen years of age and the evening classes shall be open only to women over seventeen years of age who are employed in any capacity during the day, and may be established and maintained as approved state-aided practical art classes under the provisions of, and subject to all the conditions, not inconsistent with this act, of chapter four hundred and seventy-one of the acts of the year nineteen hundred and eleven.

SECTION 2. This act shall take effect upon its passage.

By this amendment day classes in practical arts for women and girls employed during the day may be operated under the provisions of chapter 471 of the Acts of 1911. Such classes would constitute voluntary continuation classes for women over sixteen years of age.

AN ACT TO AUTHORIZE THE STATE BOARD OF EDUCATION TO ESTABLISH AND MAINTAIN CLASSES FOR THE TRAINING OF TEACHERS FOR STATE-AIDED VOCATIONAL AND CONTINUATION SCHOOLS.

Be it enacted, etc., as follows:

SECTION 1. The board of education is hereby authorized to establish and maintain classes for the purpose of training teachers for vocational and continuation schools established under the provisions of chapter four hundred and seventy-one of the acts of the year nineteen hundred and eleven, chapter one hundred and six of the acts of the year nineteen hundred and twelve, and chapter eight hundred and five of the acts of the year nineteen hundred and thirteen.

SECTION 2. This act shall take effect upon its passage.

This legislation will provide authority for the State Board of Education undertaking the training of teachers for vocational and continuation schools.

AN ACT TO PROVIDE FOR THE ESTABLISHMENT AND MAINTENANCE OF CLASSES FOR THE TRAINING OF TEACHERS FOR STATE-AIDED VOCATIONAL AND CONTINUATION SCHOOLS.

Be it enacted, etc., as follows:

SECTION 1. Any city, town or district composed of cities and towns may, with the approval of the board of education, through its school committee or other board of trustees for vocational education, establish classes for the training of teachers for continuation and vocational schools established and maintained under the provisions of chapter four hundred and seventy-one of the acts of the year nineteen hundred and eleven, of chapter one hundred and six of the acts of the year nineteen hundred and twelve, and of chapter eight hundred and five of the acts of the year nineteen hundred and thirteen.

Such classes shall be maintained under the provisions of, and subject to all the conditions, not inconsistent with this act, of chapter four hundred and seventy-one of the acts of the year nineteen hundred and eleven.

SECTION 2. This act shall take effect upon its passage.

This legislation will provide means for training teachers for vocational and continuation schools in co-operation with communities maintaining them. It will insure State supervision of this training, and enable the community maintaining approved classes to secure reimbursement to the extent of one half the expenditures for maintenance. There is at present no agency engaged in this work, and there is no supply of teachers.

**RESOLVE TO PROVIDE FACILITIES FOR THE KEEPING OF PUBLIC RECORDS
AT CERTAIN STATE NORMAL SCHOOLS.**

Resolved, That there be allowed and paid out of the treasury of the commonwealth a sum not exceeding twenty-two hundred dollars, to be expended under the direction of the board of education, for furnishing safes and for providing vaults, for keeping public records in certain state normal schools, in compliance with section eighteen of chapter thirty-five of the revised laws.

The appropriation asked in the accompanying resolve is to provide funds for the purchase of safes as stated, at Framingham, North Adams, Westfield and Worcester; and for making certain alteration necessary to provide record vaults at Bridgewater and Fitchburg.

RESOLVE TO PROVIDE FOR CERTAIN IMPROVEMENTS AT THE STATE NORMAL SCHOOL AT FITCHBURG.

Resolved, That there be allowed and paid out of the treasury of the commonwealth a sum not exceeding seven thousand dollars, to be expended under the direction of the board of education for constructing a subway, grading the playground, building a wall on the west side of North street, and making certain alterations in the basement of the state normal school building at Fitchburg.

The appropriation called for by this resolve is to be expended for the following purposes: —

1. Constructing a subway whereby the students may pass from the normal school building to the practical arts building, and to make certain alterations in the basement, necessitated by the construction of the subway.

2. To complete the grading of the playground used by pupils in the practical arts school, and to build a wall made necessary by change of grade in the highway.

**RESOLVE TO PROVIDE FOR THE INSTALLATION OF NEW SANITARY AND
BATHING ARRANGEMENTS AT THE STATE NORMAL SCHOOL AT
WORCESTER.**

Resolved, That there be allowed and paid out of the treasury of the commonwealth a sum not exceeding ten thousand dollars for installing new sanitary and bathing arrangements and for other improvements at the state normal school at Worcester.

The Board of Education has followed for several years the policy of gradually improving the conditions of the Worcester Normal School building. A number of improvements have been made, but the sanitary arrangements are still defective, and the provisions for bathing are not modern. It is proposed to install new sanitariums and to replace the antiquated bathtubs with shower-baths. The appropriation called for by this resolve is to be expended for these purposes.

RESOLVE TO PROVIDE FOR IMPROVEMENTS AT THE STATE NORMAL SCHOOL
AT LOWELL.

Resolved, That there be allowed and paid out of the treasury of the commonwealth a sum not exceeding seventeen thousand dollars, to be expended under the direction of the board of education, for plumbing, new granolithic footwalk, driveway and sidewalks, painting inside and outside, repairs to heating and ventilating apparatus, and for other improvements at the state normal school at Lowell.

The State normal school at Lowell has never been completely finished; consequently, there is great need of certain repairs in the interior, including painting and new plumbing; and also repairs to the heating and ventilating apparatus. The sidewalks and driveways are in poor condition. It is proposed to replace the footwalk by a granolithic walk, and to put in new driveways and sidewalks.

RESOLVE TO PROVIDE FOR INSTALLING AN ELECTRIC LIGHTING SYSTEM
AT THE STATE NORMAL SCHOOL AT HYANNIS.

Resolved, That there be allowed and paid out of the treasury of the commonwealth a sum not exceeding two thousand dollars, to be expended under the direction of the board of education, for wiring the buildings of the state normal school at Hyannis, and making connections with the electric lighting system of Hyannis.

The dormitory at the State normal school at Hyannis is now piped for gas; but as there is no gas plant at the village of Hyannis, this piping is useless. It is proposed to wire this building for electricity. The normal school building is wired for electricity, but the wiring is defective, and not up to present standards. It is proposed to wire these buildings so that connections may be made with the electric lighting system of the village of Hyannis.

RESOLVE TO PROVIDE FOR BUILDING AND FURNISHING A DORMITORY AND
FOR CERTAIN IMPROVEMENTS AT THE STATE NORMAL SCHOOL AT
FRAMINGHAM.

Resolved, That there be allowed and paid out of the treasury of the commonwealth a sum not exceeding one hundred and forty-eight thousand dollars, to be expended under the direction of the board of education, for building and furnishing a dormitory, building a new laundry and equipping the same, changes in Crocker hall, changes in the heating plant, installation of new boilers, enlargement of dining-room and kitchen, and for making certain other improvements at the state normal school at Framingham.

An additional dormitory is needed at the State normal school at Framingham to accommodate the students who are now obliged to rent rooms in the town. The addition of a dormitory necessitates an enlargement of the dining room and kitchen in Crocker Hall.

The Framingham Normal School has never been adequately provided with laundry facilities. It is desired to add such equipment to the plant. The new laundry and dormitory will make additional demands upon the sewer beds in connection with the school, and these should be enlarged.

The present heating plant is old and inadequate, and is likely soon to be condemned.

The appropriation called for by this resolve is for the purpose of meeting the needs of the school as stated above.

PART II.

DETAILED REPORT

OF

WORK OF THE BOARD.

PART II.
DETAILED WORK OF THE BOARD.

- I. Summary of Statistics, School Year 1912-13.
- II. State Normal Schools.
- III. Certification of Teachers in State-aided High Schools.
- IV. State Aid for High Schools.
- V. High School Tuition Reimbursement.
- VI. Registration of Teachers.
- VII. Certification of Superintendents of Schools.
- VIII. List of Superintendents of Schools.
- IX. Table of Superintendency Unions.
- X. Teachers' Conferences.
- XI. Kindergartens.
- XII. Vacation Schools.
- XIII. State-aided Vocational Education.
- XIV. State-aided Vocational Agricultural Education.
- XV. County Training Schools.
- XVI. Academies.
- XVII. Private Schools.
- XVIII. Massachusetts School Fund.
- XIX. Financial Statement of the Board.

DETAILED REPORT.

I. SUMMARY OF STATISTICS OF THE PUBLIC DAY AND EVENING SCHOOLS FOR 1912-13.

An abstract of the school returns for the school year 1912-13, giving data for each town and city and totals for the State, is found on pages i to cxxx.

A summary of statistics of attendance and expenditures for the school year July 1, 1912, to June 30, 1913; also expenditures for the last preceding town or city fiscal year follows:—

A. — SUMMARY OF STATISTICS FOR SCHOOL ENROLMENT, MEMBERSHIP, ATTENDANCE, TEACHING FORCE AND EXPENDITURES FOR THE SCHOOL YEAR JULY 1, 1912, TO JUNE 30, 1913.

I. *Number of Public Day Schools.*

1. Number of towns, 320; cities, 33. Total, 353.

All have made the annual returns required by law.

2. Number of public schools based on the single class room as the unit of comparison, 12,546
 Increase from the preceding year, 150

II. *Average Number of Months the Public Schools have been kept.*

1. Average number of months the public schools have been kept during the year, 9 $\frac{4}{10}$
 Decrease, $\frac{2}{10}$
2. Average number of months the high schools have been kept during the year, 9 $\frac{9}{10}$
 Decrease, $\frac{1}{10}$

III. *School Census Data.*

1. Number of persons in the State Sept. 1, 1912, between the ages of seven and fourteen years: males, 213,904; females, 212,045; total, 425,949
 Increase in the total, 10,541

2. Number of persons in the State Sept. 1, 1912, between the ages of five and fifteen years: males, 294,850; females, 291,483; total,	586,333
Increase in the total,	9,173
3. Number of illiterate minors in the State Sept. 1, 1912, over fourteen years of age: males, 5,394; females, 3,879; total,	9,273
Increase in the total,	341

IV. Public School Enrolment and Attendance Data.

1. Number of pupils between seven and fourteen years of age attending the public schools during the school year,	354,005
Increase,	6,186
2. Number of different pupils between five and fifteen years of age attending the public schools during the school year,	488,010
Increase,	8,788
3. Number of pupils under five years of age attending the public schools during the school year,	8,104
Decrease,	316
4. Number of pupils over fifteen years of age attending the public schools during the school year,	61,097
Increase,	1,825
5. Total enrolment of pupils of all ages in the public schools during the school year,	557,211
Increase,	10,297
6. Average membership of pupils in all the public schools during the school year,	501,983
Increase,	9,672
7. Average attendance in all the public schools during the school year,	466,686
Increase,	8,621
8. Percentage of attendance based on the average membership,	93
9. Percentage of attendance based on the total enrolment,	84
10. Number graduated from grammar schools during the school year,	28,656
Increase,	224

V. Public School Teachers.

1. Number of teachers required in the public schools during the year: men, 1,687; women, 15,292; total, . . .	16,979
Increase,	546
2. Number of teachers in the public schools who have graduated from college: in high schools, 2,136; in the elementary schools, 561; total,	2,697
Increase,	118
3. Number of teachers who have graduated from normal schools,	9,037
Increase,	418

VI. Public High Schools.

1. Number of public high schools,	271
Increase,	1
2. Number of teachers in the high schools,	2,813
Increase,	85
3. Number of pupils in the high schools: boys, 33,001; girls, 38,582; total,	71,583
Increase,	2,264
4. Number of pupils admitted to the freshman class: boys, 12,139; girls, 13,240; total,	25,379
Decrease,	249
5. Number of graduates from high schools: boys, 4,002; girls, 5,679; total,	9,681
Increase,	226
6. Expenditures for high school support,	\$4,292,395 72
Increase,	\$301,472 54

VII. Public Evening Schools.

1. Number of cities and towns having public evening schools,	70
Decrease,	3
2. Number of evening schools,	340
Decrease,	2
3. Number of teachers,	2,306
Increase,	172
4. Number of different pupils in attendance: males, 40,359; females, 24,367; total,	64,726
Increase in the total,	1,454
5. Average attendance,	31,962
Increase,	3,126
6. Expended upon evening schools,	\$389,789 15
Increase,	\$47,390 41

VIII. Public Kindergartens.

1. Number of cities and towns having public kindergartens,	32
Decrease,	3
2. Number of public kindergartens,	308
Decrease,	6
3. Number of teachers,	536
Increase,	9
4. Number of pupils,	17,978
Decrease,	138
5. Cost of public kindergartens,	\$381,256 78
Increase,	\$24,984 18

IX. Vacation Schools, 1912.

1. Number of vacation schools supported at public expense,	45
2. Number of cities and towns having vacation schools,	20
3. Number of teachers,	173
4. Number of pupils,	5,727
5. Average number of months schools were kept,	1 $\frac{7}{8}$
6. Cost of vacation schools,	\$13,130 70

X. Academies and Private Schools.

1. Number of incorporated academies,	42
Decrease,	5
2. Whole number of pupils in the academies for the year,	7,187
Increase,	187
3. Amount of tuition paid in the academies during the year,	\$631,895 01
Increase,	\$36,328 00
4. Number of private schools returned,	321
Increase,	22
5. Whole number of pupils in the private schools during the year,	110,670
Increase,	15,397
6. Amount of tuition paid in private schools (much of it estimated),	\$990,828 48
Increase,	\$25,609 45

XI. Cost of the Public Schools for School Fiscal Year ending June 30, 1913.

SUPPORT.

A. Total expenditure for the *support* of the public schools, \$20,284,631 56

Increase, \$1,515,426 71

This expenditure is distributed among the following classes indicated in the statutory definition of support: —

1. School committee: —

Salaries, \$148,933 63

Other expenses, 158,321 20

2. Superintendence of schools and enforcement of the law: —

Salaries, 437,174 77

Other expenses, 111,900 54

3. Supervisors: —

Salaries, 387,464 29

Other expenses, 12,748 95

4. Principals' salaries, 1,647,827 38

5. Teachers' salaries, 11,899,673 12

6. Text-books, 476,059 38

7. Stationery, supplies and miscellaneous, 603,037 19

8. Janitors' service, 1,390,021 24

9. Fuel, 967,513 02

10. Miscellaneous expenses of operation, . 258,428 80

11. Repairs, replacement and upkeep, . 865,079 07

12. Libraries, 2,169 23

13. Promotion of health, 133,137 63

14. Transportation, 384,149 45

15. Miscellaneous expenses, 400,992 67

OUTLAY.

B. Total expenditure for *buildings* for the public schools, \$3,174,764 83

Decrease, \$558,964 67

This expenditure is distributed as follows: —

1. New grounds, buildings and alterations,

. \$2,863,941 90

2. New equipment, 310,822 93

SUPPORT AND OUTLAY.

C. Total expenditure from all sources for *support* and *buildings* for the public schools, that is, for all public school purposes,

. \$23,459,396 39

Increase, \$956,462 04

XII. *Cost of the Public Schools per Child.*

1. Average expenditure on account of the public schools for support, including *State and other contributions* as well as money raised by *taxation*, for each child in the State between five and fifteen years of age (586,333), \$34 60
 Increase, \$2 08
2. Average expenditure on account of public schools for support, including *State and other contributions* as well as money raised by *taxation*, for each child in the average membership of the public schools (501,983), \$40 41
 Increase, \$2 29
3. Average expenditure on account of the public schools for support and buildings, including *State and other contributions* as well as money raised by *taxation*, for each child in the State between five and fifteen years of age (586,333), \$40 01
 Increase, \$1 03
4. Average expenditure on account of public schools for support and buildings, including *State and other contributions* as well as money raised by *taxation*, for each child in the average membership of the public schools (501,983), \$46 73
 Increase, \$1 02

B. — COST OF SUPPORT OF THE PUBLIC SCHOOLS FOR THE LAST PRECEDING TOWN OR CITY FISCAL YEAR.

I. *Total Expenditure for Support of Public Schools.*

Total expenditure for the support of the public schools, \$19,531,247 23

1. Amount included in the total expenditure for support but derived from *other sources* than local taxation or its equivalent, such as aid from the State, income from local funds, voluntary contributions, etc., \$635,239 18
 Decrease, \$315,968 25
2. Amount raised by *local taxation* and expended for the support of public schools, being the total expenditure for such support diminished by contributions for such support from other sources than local taxation, \$18,896,008 05
 Increase, \$1,078,010 63

II. *Cost of the Public Schools per Child.*

1. Average *taxation* cost of the public schools for support for each child in the State between the ages of five and fifteen years (586,333), \$32 23
 Increase, \$1 36

2. Average <i>taxation</i> cost of the public schools for <i>support</i> for each child in the average membership of the public schools (501,983),	\$37 64
Increase,	\$1 45
3. Average expenditure on account of the public schools for <i>support</i> , including <i>State and other contributions</i> as well as money raised by <i>taxation</i> , for each child in the State between five and fifteen years of age (586,333),	\$33 31
Increase,	\$0 79
4. Average expenditure on account of public schools for <i>support</i> , including <i>State and other contributions</i> as well as money raised by <i>taxation</i> , for each child in the average membership of the public schools (501,983),	\$38 91
Increase,	\$0 77

III. *Percentage of State Valuation expended for Public School Purposes.*

1. Percentage of the total State valuation (April 1, 1912) raised by <i>local taxation</i> and expended for the <i>support</i> of the public schools,004 $\frac{4}{10}$ % or \$4.45 per \$1,000
Increase,000 $\frac{1}{10}$ % or \$0.08 per \$1,000

II. STATE NORMAL SCHOOLS.

Admission.

The plan of admission to State normal schools has been changed by increasing the elective list by the addition of:—

Stenography,	1 or 2 units.
Domestic science or manual training,	1 unit.
Commercial geography,	1 unit.
Arithmetic,	1 unit.
Bookkeeping,	1 unit.
Current events,	1 unit.
General science,	1 unit.

Certain changes have also been made in the number of units allowed in history and in foreign languages. The purpose of these changes is to give larger liberty to pupils who intend to enter a normal school in planning their high school courses. The requirements in full are as follows:—

I. Candidates for admission to a Massachusetts State normal school must have attained the age of seventeen years, if young men, and sixteen years, if young women (for admission to the Household Arts course at the Framingham Normal School, an age of at least eighteen years is required); must be

free from diseases or infirmities which would unfit them for the office of teacher; and must present certificates of good moral character. They must also submit detailed records of scholarship from the principal of the high school, or other school in which preparation has been made, showing the amount of time given to individual subjects and the grade therein, and such additional evidence of qualifications for the calling of a teacher as the Board of Education may require.

II. A candidate for admission as a regular student to a general course must present a diploma of graduation from a high school, or its equivalent, and, in addition, must offer satisfactory evidence of preparation in the subjects listed under "A," "B" and "C," amounting to 14 units, 10 of which units, however, must be in subjects given under "A" and "B," secured either by examination or certification. A unit represents a year's study in any subject in a secondary school, constituting approximately one quarter of a full year's work.

A. *Prescribed Subjects.* — Three units.

- (1) English literature and composition, 3 units.

B. *Elective Subjects.* — At least 7 units from the following subjects: —

- | | |
|---|---------------|
| (2) Algebra, | 1 unit. |
| (3) Geometry, | 1 unit. |
| (4) History, ¹ | 1 or 2 units. |
| (5) Latin, | 2 to 4 units. |
| (6) French, | 2 or 3 units. |
| (7) German, | 2 or 3 units. |
| (8) Drawing, ² | 1 unit. |
| (9) Physics, | 1 unit. |
| (10) Chemistry, | 1 unit. |
| (11) Biology, botany or zoölogy, ² | 1 unit. |
| (12) Physical geography, ² | 1 unit. |
| (13) Physiology and hygiene, ² | 1 unit. |
| (14) General science, ² | 1 unit. |
| (15) Stenography, | 1 or 2 units. |
| (16) Domestic science or manual training, | 1 unit. |
| (17) Commercial geography, ² | 1 unit. |
| (18) Arithmetic, ² | 1 unit. |
| (19) Bookkeeping, | 1 unit. |

¹ History includes: Ancient; Mediæval and Modern; English; American History and Civics; and Current Events.

² Half units in these subjects will also be accepted.

For the present, the topics included within the foregoing subjects will be such as are usually accepted by Massachusetts colleges for entrance. The outlines submitted by the College Entrance Examination Board (Substation 84, New York City) will be found suggestive by high schools.

For admission to the Massachusetts Normal Art School, a special examination in drawing will be required, in addition to the above.

C. *Additional Subjects.* — At least 4 units from any of the foregoing subjects, or from other subjects approved by the secondary school towards the diploma of graduation of the applicant. Work in any subject approved for graduation, in addition to that for which credit is secured by examination or certification, may count towards these 4 units.

III. *Examinations.* — Each applicant for admission, unless exempted by the provisions of sections IV. and V., must pass entrance examinations in the subjects as required under "A" and "B." Examinations in these subjects will be held at each of the normal schools in June and September of each year (examinations for the Massachusetts Normal Art School are held only in September). Candidates applying for admission by examination must present credentials or certificates from their schools to cover the requirements under "C," and will not be given examinations in these subjects.

IV. *Division of Examinations.* — Candidates for admission to the normal schools may take all of the examinations at once, or divide them between June and September. If the examinations are divided, the candidate will receive no credit for the first examination, unless he secures by examination or certification a total of at least 5 of the 10 units required. Examinations cannot be divided between different years.

V. *Admission on Certificate.* — Candidates from public high schools which are on the certificate list of the New England College Entrance Certificate Board may be exempted by the principal of the normal school from examination in any of the subjects under "A" and "B" in which the principal of the high school shall certify that the applicant, in accordance with the practice of the high school, is entitled to certification to a college in the membership of the New England College Entrance

Certificate Board. Candidates from public high schools approved for this purpose by the Board of Education may be exempted by the principal of the normal school from examination in any subjects under "A" and "B" in which the applicant has a record of B, or 80 per cent., in the last year in which such subject has been pursued, and when the principal of the high school states that the work of the applicant entitles him to certification. Credits secured by any candidate from the Board of Regents of the State of New York, or for admission to any college in the New England College Entrance Certificate Board, either by examination or certification, or in the examinations of the College Entrance Examination Board, shall be accepted towards the total of 10 units under "A" and "B." In addition to units granted by certification candidates must present credentials for subjects under "C."

VI. *Admission as Special Students.* — Graduates of normal schools and colleges and persons with satisfactory experience in teaching may be admitted as special students to all courses, under such regulations as the Board of Education may prescribe. Applicants with satisfactory teaching experience may be admitted to the one year's course without examination or other requirements.

VII. *Admission to Special Courses.* — Persons possessing qualifications for the pursuit of work offered in special courses may be admitted as special students under such regulations as the Board may prescribe.

Table showing expenditures for maintenance of State normal schools from July 1, 1912, to June 30, 1913.

SCHOOL.	Cubic contents of buildings.	Average membership, 1912-13.	SALARIES, WAGES AND LABOR.					
			Normal school.	Per capita.	Training school.	Per capita.	General administration.	Per capita.
Bridgewater,	1,776,381	360	\$30,057 21	\$53 49	\$5,997 06	\$19 44	\$10,230 08	\$28 43
Fitchburg,	1,349,631	269	19,975 00	74 25	21,005 94	80 69 ¹	7,063 90	26 26
Framingham,	738,380	306	26,551 65	83 50	6,820 78	22 29	6,957 67	22 74
Hyannis,	447,484	100 ²	13,659 18	136 59	2,517 52	25 18	3,117 23	31 17
Lowell,	525,041	148	17,474 16	118 07	4,832 50	32 65	4,219 78	28 51
North Adams,	937,672	127	15,519 38	122 20	6,952 90	54 75	5,837 45	46 36
Salem,	979,716	321	26,996 37	84 10	5,806 68	17 47	4,772 48	14 87
Westfield,	1,077,881	200	14,344 64	71 72	6,719 88	33 60	5,068 73	25 04
Worcester,	510,452	200	19,210 31	96 05	2,833 36	14 17	3,782 51	18 91
Normal Art (Boston),	507,519	337 ³	32,351 65	96 00	2,221 67	6 59	5,485 29	16 28
Totals,	8,860,157	2,368	\$215,139 55	-	\$67,208 89	-	\$56,525 12	-
								\$338,873 56

¹ Partially offset by amount received from city of Fitchburg.

² Includes 64 students at regular session of normal school (189 days) and 285 students at summer session (five weeks). Five weeks of summer session equals one eighth of regular session; $\frac{1}{8}$ of 285 = 35.6 + 64 = 100 average membership.

³ Includes 316 students at regular session (1,190 hours) and 96 students at evening session (80 hours). Eighty hours evening session equals one fifteenth regular session; $\frac{1}{15}$ of 316 = 21 + 316 = 337 average membership.

Table showing expenditures for maintenance of State normal schools from July 1, 1912, to June 30, 1913
— Continued.

[The cost for furnishings, heat, light and power, repairs and improvements, and grounds includes both normal school and boarding halls.]

SCHOOL.	FURNISHINGS.			HEAT, LIGHT AND POWER.			REPAIRS AND IMPROVEMENTS.			GROUNDS.		
	Expended.	Per capita.	Per 1,000 cubic feet.	Expended.	Per capita.	Per 1,000 cubic feet.	Expended.	Per capita.	Per 1,000 cubic feet.	Expended.	Per capita.	Per 1,000 square feet.
Bridgewater,	\$882 60	\$2 45	\$0 50	\$4,345 70	\$12 07	\$2 45	\$6,368 01	\$17 69	\$3 59	\$276 08	\$0 77	\$0 30
Fitchburg,	351 29	1 31	26	4,811 16	17 89	3 57	4,956 22	18 42	3 67	847 57	3 15	1 30
Frammingham,	453 68	1 48	61	5,022 32	16 41	6 81	5,838 06	19 14	7 94	460 07	1 50	1 00
Hyannis,	928 89	9 29	2 06	1,854 09	18 54	4 15	3,245 59	32 46	7 26	68 65	69	13
Lowell,	344 19 ¹	2 33	66	894 80 ¹	6 06	1 71	510 18 ¹	3 45	97	385 67 ¹	2 61	2 70
North Adams,	717 10	5 65	77	4,506 76	35 49	4 81	3,145 88	24 77	2 45	429 39	3 33	1 41
Salem,	1,521 42 ¹	4 74	1 55	1,683 70 ¹	5 25	1 73	2,162 31 ¹	6 74	2 16	153 33 ¹	47	39
Westfield,	737 56	3 69	68	7,937 66	39 69	7 37	4,001 99	20 01	3 71	123 53	61	88
Worcester,	953 65	4 77	1 86	1,639 37	8 20	3 21	5,842 10	29 21	11 45	159 00	80	74
Normal Art (Boston),	1,454 56 ¹	4 32	2 86	1,632 27 ¹	4 99	3 31	1,803 51 ¹	5 35	3 55	-	-	-
Totals,	\$8,344 94	-	-	\$34,377 83	-	-	\$37,893 85	-	-	\$2,901 29	-	-

¹ No boarding hall connected with these schools.

Table showing expenditures for maintenance of State normal schools from July 1, 1912, to June 30, 1913
— Concluded.

SCHOOL.	SUPPLIES — NORMAL SCHOOL.		SUPPLIES — TRAINING SCHOOL.		SUPPLIES — OFFICE AND OTHER.		MISCELLANEOUS.		TOTAL.		Receipts.
	Expended.	Per capita.	Expended.	Per capita.	Expended.	Per capita.	Expended.	Per capita.	Expended.	Per capita.	
Bridgewater,	\$3,062 20	\$8 51	\$690 39	\$1 92	\$1,103 06	\$3 06	\$848 79	\$3 36	\$64,861 78	\$180 17	\$1,617 10
Fitchburg,	2,038 69	7 53	2,192 82 ¹	8 15 ¹	589 03	2 19	1,529 71	5 69	66,061 33	245 58 ¹	24,613-89
Frammingham,	3,004 32	9 82	107 00	35	637 94	2 08	989 86	3 23	55,863 35	192 36	1,004 68
Hyannis,	954 13	9 54	42 50	43	622 08	6 22	618 72	6 19	27,028 58	276 28	756 11
Lowell,	2,194 45	14 83	483 93	3 27	451 58	3 05	1,149 92	7 77	32,941 16	222 58	108 00
North Adams,	1,627 81	12 83	1,113 39	8 77	467 84	3 68	804 03	6 33	41,171 93 ²	324 19	2,349 83
Salem,	3,467 19	10 80	516 71	1 61	783 66	2 46	1,445 84	4 50	49,113 69	153 00	844 93
Westfield,	2,678 62	13 39	204 13	1 02	891 53	4 46	849 29	4 25	43,496 56	217 48	664 94
Worcester,	3,030 23	15 15	1 71	01	1,500 59	7 50	1,371 94	6 86	40,324 77	201 62	208 00
Normal Art (Boston),	1,388 01	4 12	-	-	819 56	2 43	695 40	2 06	47,901 92	142 14	3,701 26
Totals,	\$23,445 65	-	\$5,352 58	-	\$7,871 87	-	\$10,303 50	-	\$469,365 07	-	\$35,865 93

¹ Partially offset by amount received from city of Fitchburg.

² Includes \$2,000 expended for correspondence course.

III. CERTIFICATION OF TEACHERS IN STATE-AIDED HIGH SCHOOLS.

Chapter 375 of the Acts of 1911 authorizes the Board of Education to define the requirements of certification of teachers in State-aided high schools, and to grant certificates to eligible candidates.

Three classes ¹ of certificates are now granted, namely: preliminary, permanent and special.

The requirements for each form of certificate are as follows:—

I. *Preliminary Certificate* (valid for two years; renewable once):—

1. *Academic.* — (a) Possession of a Bachelor's degree from a college maintaining standards at least equal to those of colleges in Massachusetts empowered to grant such a degree.

(b) Evidence of preparation in at least two subjects, each representing not less than three year-hours of work. Such subjects, to be hereafter called "majors," are those to which the candidate expects to devote particular attention in his work as a teacher.

(c) Evidence of preparation in at least two subjects, additional to those described in (b), representing not less than one and one half year-hours of work. Such subjects are to be called hereafter "minors."

Majors and minors are to be selected from the following list:—

English,	Agriculture,
History,	Biology,
French,	Botany,
Household Arts,	Physics,
German,	Chemistry,
Latin,	Physical geography,
Greek,	Physiology,
Music,	Introductory social science,
Mathematics,	Introductory natural science.

2. *Professional.* — One of the following options: (a) Completion of courses, or other satisfactory evidence of attainment

¹ A general certificate was granted prior to July 1, 1912, but is no longer issued, as by law, chapter 375 of the Acts of 1911, applications for this certificate could not be accepted after July 1, 1912.

in at least two of the following subjects, aggregating not less than three year-hours of work: principles of education; history of education; educational psychology; school administration; problems of secondary education, with instruction in methods of teaching particular subjects; school hygiene; practice teaching under supervision.

(b) Diploma from an approved normal school.

(c) Not less than two years' teaching experience, aggregating at least seventy weeks, in secondary schools, the quality of such teaching to be established to the satisfaction of the Board.

(d) Completion of at least one course of thirty hours in a professional subject, in the summer school of an approved college or university, or other institution offering equivalent courses.

Preliminary certificates are, as a rule, granted on credentials from the institution in which candidates have studied. The Board, however, may require an examination in any case. Candidates who desire certification on credentials must present such credentials, together with statements of general qualifications, from the president or other college administrative officer or committee, on blanks provided by the Board.

II. *Permanent (Life) Certificate*:—

1. *Prior Certification*.—A general or preliminary certificate granted by the Board of Education.

2. *Experience in Teaching*.—Successful service as a teacher in secondary schools in Massachusetts for at least two continuous years; the character of such experience is to be established to the satisfaction of the Board.

3. *Professional Study*.—A thesis satisfactory to the Board on some phase of secondary education. The preparation of this thesis will require a knowledge of conditions in secondary schools, ability to discuss secondary school problems intelligently, and a command of the results of research by experts in some field of secondary school education.

III. *Special Certificate*.—The special certificate will be granted, on application, to persons found to be qualified to teach one or more of the following subjects: manual arts, music, drawing, domestic science, physical training, agriculture and commercial subjects.

The following table shows the number of teachers who have been granted certificates up to Dec. 1, 1913: —

	Men.	Women.	Total.
General,	167	420	587
Preliminary,	95	176	271
Special,	37	131	168
Totals,	299	727	1,026

IV. STATE AID FOR HIGH SCHOOLS.

Every town containing 500 families is required by law to maintain a high school and receives no State aid for that purpose. Any town having less than 500 families, of which there are 173 by the United States census of 1910, may receive \$500 from the State annually, provided: —

1. That it maintains a high school approved by the Board of Education.

2. That the high school has at least two teachers and offers a four years' course of study.

3. That the valuation of the town per pupil in the average membership of its public schools does not exceed the corresponding ratio for the Commonwealth.

The following 48 towns, having complied with the above conditions of the law, received the \$500 grant for the school year ending June 30, 1913: —

Ashby,	Littleton,	Shelburne,
Ashfield,	Lunenburg,	Sherborn,
Ashland,	Medfield,	Shirley,
Avon,	Mendon,	Shrewsbury,
Bernardston,	Millis,	Southborough,
Bolton,	New Marlborough,	Sterling,
Charlemont,	New Salem,	Stow,
Charlton,	Northborough,	Sudbury,
Chester,	Northfield,	Tisbury,
Conway,	Norwell,	Wellfleet,
Douglas,	Pembroke,	West Boylston,
Edgartown,	Petersham,	Westminster,
Essex,	Plainville,	West Newbury,
Granby,	Rutland,	Williamsburg,
Hadley,	Sandwich,	Wilmington,
Huntington,	Sheffield,	Wrentham. — 48.

Twenty-six towns received the grant in 1903; thirty-four in 1904; thirty-six in 1905; thirty-seven in 1906; forty in 1907; forty-four in 1908; forty-four in 1909; forty-five in 1910; forty-seven in 1911; and forty-nine in 1912.

The following 14 towns with less than 500 families maintained high schools but the valuation per pupil in the average membership of their public schools was in *excess* of the corresponding ratio for the Commonwealth (\$8,632) and, therefore, they were not entitled to receive the \$500 grant from the State: —

Brewster,	Nahant,	Topsfield,
Carver,	Oak Bluffs,	Weston,
Dover,	Orleans,	West Tisbury,
Hamilton,	Princeton,	Yarmouth. — 14.
Harvard,	Stockbridge,	

The following 5 towns had academies, and did not receive the State grant: —

Boxford,	Hatfield,
Brimfield,	Marion. — 5.
Duxbury,	

V. HIGH SCHOOL TUITION REIMBURSEMENT.

Any town of less than 500 families not maintaining a high school must pay tuition for high school instruction in other towns or cities, and the State reimburses the town for such payments for tuition to the extent of one half or the entire cost, according to the valuation, provided: —

1. That the high school attended is approved by the Board of Education.

2. That the valuation of the town per pupil in the average membership of its public schools does not exceed the corresponding ratio for the Commonwealth.

For the year ending June 30, 1913: 106 towns with less than 500 families did not maintain high schools.

The following 12 of these towns each had a valuation per pupil in the average membership of its public schools in *excess* of the corresponding ratio for the Commonwealth (\$8,632) and,

therefore, they were not entitled to receive State reimbursement for tuition expenditures: —

Bedford,	Mattapoisett,
Chilmark,	Rowley,
Gosnold,	Shutesbury,
Hull,	Tolland,
Lincoln,	Wenham,
Longmeadow,	Westwood. — 12.

The following 6 towns presented no claims for reimbursement of tuition expenditures and presumably had no pupils in attendance in high schools: —

Gay Head,	Sandisfield,
Holland,	Wales,
New Ashford,	Westhampton. — 6.

There were 88 towns which were reimbursed in whole or in part for tuition expenditures. The names of these towns, together with the amount received by each town, are given in the table below. Ten of these towns were reimbursed for one half cost of tuition, as their valuation exceeded \$1,000,000; and 78 were reimbursed for full cost of tuition, as their valuation did not exceed \$1,000,000.

In the 88 towns which were reimbursed in whole or in part for tuition expenditures, there were 1,113 pupils. This is a net decrease of 6 towns and 144 pupils over the numbers for the preceding year, as shown below.

The following 9 towns did not receive reimbursement for the year ending June 30, 1913, but received such reimbursement the previous year: —

Auburn, Hanson, Seekonk, Swansea, and West Bridgewater each now has more than 500 families.

Bedford and Rowley each now has a valuation per pupil in *excess* of the corresponding ratio for the Commonwealth.

Westminster now maintains a high school for which it receives the \$500 grant from the State.

Westhampton presented no claim.

The following 3 towns received reimbursement for the year ending June 30, 1913, but did not receive such reimbursement the previous year: —

Burlington and Halifax now have valuations per pupil less than the corresponding ratio for the Commonwealth.

Mount Washington presented a claim but did not present such claim the previous year.

The total amount reimbursed by the State for tuition expenditures for the year ending June 30, 1913, was \$47,711.09. This sum, added to that paid for the 48 State grants of \$500 each, gives a total of \$71,711.09 expended by the State for high school instruction.

Table showing high school tuition reimbursements for the school year 1912-13, under section 3, chapter 42, Revised Laws, as amended by chapter 433, Acts of 1902, and chapter 537, Acts of 1911.

[NOTE. — Towns, the names of which are italicised, were reimbursed by the State for half tuition expenditures only.

TOWNS.	Total number of pupils from each town.	High schools attended.	Number of pupils attending each high school.	Rate per year.	Amounts.
<i>Acushnet</i> , . . .	24	Fairhaven,	20	\$75 00	\$693 75
"		New Bedford,	4	75 00	150 00
Alford,	3	Great Barrington,	3	54 00	162 00
Becket,	14	Springfield (Technical),	1	100 00	100 00
"		Westfield,	9	50 00	335 00
"		Lee,	1	50 00	50 00
"		Chester,	3	60 00	148 33
Bellingham, . . .	27	Franklin,	9	40 00	330 00
"		Milford,	17	40 00	637 00
"		Medway,	1	60 00	48 00
Berkley,	15	Taunton,	13	60 00	729 00
"		Fall River,	2	75 00	131 25
Berlin,	29	Hudson,	15	40 00	533 00
"		Clinton,	13	60 00	715 50
"		Northborough,	1	45 00	45 00
Blandford, . . .	7	Westfield,	3	50 00	146 75
"		Springfield (Technical),	2	100 00	180 00
"		Chester,	2	60 00	120 00
Boxborough, . . .	16	Concord,	12	55 00	660 00
"		Littleton,	3	36 00	108 00
"		Maynard,	1	50 00	50 00

High school tuition reimbursements, etc. — Continued.

Towns.	Total number of pupils from each town.	High schools attended.	Number of pupils attending each high school.	Rate per year.	Amounts.
Boylston, . . .	14	Worcester (South), . . .	3	\$70 00	\$210 00
" . . .		Worcester (English), . . .	2	70 00	122 50
" . . .		Worcester (North), . . .	3	70 00	105 00
" . . .		Clinton, . . .	3	60 00	169 50
" . . .		Northborough, . . .	3	{ 30 00 45 00 }	117 00
Buckland, . . .	32	Shelburne Falls (Arms Academy),	24	48 00	912 00
" . . .		Ashfield, . . .	8	40 00	304 00
Burlington, . . .	15	Woburn, . . .	12	50 00	575 00
" . . .		Lexington, . . .	3	60 00	142 50
Carlisle, . . .	15	Concord, . . .	11	55 00	533 00
" . . .		Chelmsford, . . .	4	20 00	69 00
Cheshire, . . .	32	Adams, . . .	32	36 00	1,092 00
Chesterfield, . . .	1	Springfield (Central), . . .	1	100 00	100 00
Clarksburg, . . .	16	North Adams, . . .	16	45 00	600 00
Colrain, . . .	32	Springfield (Technical), . . .	1	100 00	100 00
" . . .		Greenfield, . . .	5	30 00	150 00
" . . .		Shelburne Falls (Arms Academy),	26	48 00	1,200 00
Cummington, . . .	14	Ashfield, . . .	6	40 00	240 00
" . . .		Springfield (Technical), . . .	2	100 00	200 00
" . . .		Springfield (Central), . . .	2	100 00	200 00
" . . .		Northampton, . . .	2	60 00	120 00
" . . .		Dalton, . . .	2	36 00	72 00
Dana, . . .	10	Springfield (Technical), . . .	1	100 00	100 00
" . . .		Petersham, . . .	1	50 00	50 00
" . . .		New Salem, . . .	2	40 00	80 00
" . . .		Barre, . . .	1	50 00	50 00
" . . .		Athol, . . .	5	36 00	180 00
Dunstable, . . .	5	Lowell, . . .	1	60 00	60 00
" . . .		Concord, . . .	3	55 00	165 00
" . . .		Pepperell, . . .	1	30 00	16 00
Eastham, . . .	13	Orleans, . . .	13	32 00	386 40
East Longmeadow, . . .	38	Springfield (Central), . . .	14	100 00	1,147 50
" " . . .		Springfield (Commercial), . . .	9	100 00	820 00
" " . . .		Springfield (Technical), . . .	15	100 00	1,247 50
Egremont, . . .	10	Great Barrington (Searles), . . .	10	54 00	522 00

High school tuition reimbursements, etc. — Continued.

Towns.	Total number of pupils from each town.	High schools attended.	Number of pupils attending each high school.	Rate per year.	Amounts.
Enfield, . . .	22	Athol,	22	\$36 00	\$694 40
Erring, . . .	15	Montague (Turners Falls), . .	3	40 00	39 50
" . . .		Orange,	1	40 00	20 00
" . . .		Greenfield,	11	30 00	152 25
Florida, . . .	5	North Adams,	3	45 00	105 00
" . . .		Charlemont,	2	45 00	30 00
Freetown, . . .	15	Fall River,	9	75 00	639 37
" . . .		Taunton,	1	60 00	36 00
" . . .		New Bedford,	4	75 00	262 50
" . . .		Middleborough,	1	55 00	55 00
Gill, . . .	16	Montague (Turners Falls), . .	12	40 00	392 00
" . . .		Northfield,	1	45 00	45 00
" . . .		Barnardston,	3	20 00	60 00
Goshen, . . .	3	Ashfield,	2	40 00	80 00
" . . .		Williamsburg,	1	35 00	35 00
Granville, . . .	5	Westfield,	4	50 00	200 00
" . . .		Orange,	1	40 00	40 00
Greenwich, . . .	7	Athol,	3	36 00	108 00
" . . .		Springfield (Technical), . . .	1	100 00	100 00
" . . .		Newton (Technical),	1	100 00	100 00
" . . .		New Salem,	2	40 00	53 34
Halifax, . . .	5	Bridgewater,	2	50 00	100 00
" . . .		Brockton,	1	80 00	80 00
" . . .		Kingston,	2	45 00	90 00
Hampden, . . .	6	Springfield (Central),	2	100 00	200 00
" . . .		Springfield (Commercial), . .	2	100 00	200 00
" . . .		Springfield (Technical), . . .	2	100 00	200 00
Hancock, . . .	1	Pittsfield,	1	36 00	36 00
Hawley, . . .	2	Charlemont,	1	45 00	45 00
" . . .		Ashfield,	1	40 00	40 00
Heath, . . .	4	Charlemont,	3	45 00	135 00
" . . .		Shelburne Falls (Arms Academy),	1	48 00	48 00
Hinsdale, . . .	19	Pittsfield,	15	36 00	484 30
" . . .		Dalton,	4	36 00	126 00
Hubbardston, . .	13	Gardner,	8	40 00	313 00

High school tuition reimbursements, etc. — Continued.

TOWNS.	Total number of pupils from each town.	High schools attended.	Number of pupils attending each high school.	Rate per year.	Amounts.
Hubbardston—Con.		Barre,	4	\$50 00	\$200 00
" . . .		Worcester (South),	1	70 00	17 50
Lakeville, . . .	15	Middleborough,	14	55 00	341 00
" . . .		Taunton,	1	60 00	30 00
Lanesborough, . .	22	Pittsfield,	22	36 00	763 20
Leverett, . . .	7	Amherst,	6	35 00	194 00
" . . .		Montague (Turners Falls),	1	40 00	40 00
Leyden, . . .	1	North Adams,	1	45 00	45 00
Lynnfield, . . .	24	Wakefield,	18	50 00	436 87
" . . .		Peabody,	6	45 00	115 20
Maahpee, . . .	1	Barnstable (Elisabeth Lowell),	1	40 00	40 00
Middlefield, . . .	3	Chester,	3	60 00	144 00
Middleton, . . .	32	Danvers,	31	50 00	1,500 00
" . . .		Salem,	1	75 00	25 00
Monroe, . . .	2	Charlemont,	2	45 00	90 00
Monterey, . . .	2	Great Barrington (Searles),	2	54 00	90 00
Montgomery, . .	5	Westfield,	4	50 00	166 25
" . . .		Huntington,	1	45 00	45 00
Mount Washington,	2	Sheffield,	2	50 00	100 00
New Braintree, . .	17	North Brookfield,	7	40 00	269 00
" " . . .		Hardwick,	9	50 00	412 50
" " . . .		Barre,	1	50 00	35 00
Newbury, . . .	10	Newburyport,	7	48 00	160 00
" . . .		Newburyport,	3	12 00 ¹	18 00
Norfolk, . . .	13	Walpole,	12	50 00	285 00
" . . .		Franklin,	1	40 00	20 00
North Reading, . .	32	Reading,	32	50 00	1,583 75
Oakham, . . .	17	North Brookfield,	7	40 00	194 00
" . . .		Barre,	9	50 00	450 00
" . . .		Hardwick,	1	50 00	50 00
Otis, . . .	1	Lee,	1	50 00	50 00
Paxton, . . .	6	Worcester (English),	4	70 00	210 00
" . . .		Spencer,	1	37 00	37 00
" . . .		Leicester (Leicester Academy),	1	50 00	50 00
Pelham, . . .	7	Amherst,	7	35 00	228 00

¹ Foreign languages only.

High school tuition reimbursements, etc. — Continued.

TOWNS.	Total number of pupils from each town.	High schools attended.	Number of pupils attending each high school.	Rate per year.	Amounts.
Peru, . . .	6	Dalton,	3	\$36 00	\$108 00
" . . .		Pittsfield,	2	36 00	49 50
" . . .		Springfield (Central),	1	100 00	100 00
Phillipston, . . .	5	Templeton,	1	40 00	40 00
" . . .		Athol,	4	36 00	95 10
Plainfield, . . .	9	Ashfield,	6	40 00	207 00
" . . .		Northampton,	2	60 00	120 00
" . . .		Dalton,	1	36 00	14 40
Plympton, . . .	8	Kingston,	3	45 00	135 00
" . . .		Plymouth,	1	50 00	50 00
" . . .		Middleborough,	4	55 00	158 13
Prescott, . . .	9	Boston,	2	82 00	164 00
" . . .		Springfield (Central),	1	100 00	100 00
" . . .		Athol,	2	36 00	72 00
" . . .		New Salem,	3	40 00	100 00
" . . .		Hardwick,	1	50 00	50 00
Raynham, . . .	25	Taunton,	23	60 00	1,502 70
" . . .		Bridgewater,	1	50 00	50 00
" . . .		Easton,	1	40 00	40 00
Rehoboth, . . .	17	Taunton,	8	60 00	440 70
" . . .		Attleborough,	5	50 00	250 00
" . . .		New Salem,	1	40 00	40 00
" . . .		Fall River,	3	75 00	225 00
Richmond, . . .	10	Pittsfield,	10	36 00	348 30
Rochester, . . .	12	Fairhaven,	8	75 00	570 00
" . . .		Middleborough,	2	55 00	110 00
" . . .		Wareham,	2	45 00	90 00
Rowe, . . .	1	North Adams,	1	45 00	45 00
Royalston, . . .	5	Athol,	3	36 00	78 66
" . . .		Gardner,	2	40 00	80 00
Russell, . . .	8	Westfield,	6	50 00	156 25
" . . .		Huntington,	2	45 00	56 24
Salisbury, . . .	9	Newburyport,	6	48 00	144 00
" . . .		Newburyport,	3	12 00 ¹	14 00
Savoy, . . .	2	Amherst,	1	35 00	35 00

¹ Foreign languages only.

High school tuition reimbursements, etc. — Continued.

Towns.	Total number of pupils from each town.	High schools attended.	Number of pupils attending each high school.	Rate per year.	Amounts.
Savoy — <i>Con.</i>		Adams,	1	\$36 00	\$36 00
Southampton, .	20	Westfield,	2	50 00	100 00
“		Easthampton,	16	50 00	800 00
“		Holyoke,	1	50 00	25 00
“		Northampton,	1	60 00	60 00
Southwick, . . .	11	Westfield,	11	50 00	463 75
Sturbridge, . . .	4	Southbridge,	3	30 00	40 00
“		Brookfield,	1	25 00	12 50
Sunderland, . . .	23	Amherst,	20	35 00	681 00
“		Worcester (Classical),	1	70 00	70 00
“		Northampton,	1	60 00	60 00
“		Hadley (Hopkins Academy),	1	40 00	40 00
Uxbridge,	48	Lowell,	47	60 00	1,340 00
“		Wilmington,	1	50 00	25 00
Truro,	11	Wellfleet,	6	40 00	212 00
“		Provincetown,	5	40 00	168 00
Tyngsborough, . .	24	Lowell,	24	60 00	1,320 00
Tyringham, . . .	2	Lee,	2	50 00	53 75
Warwick,	3	Orange,	3	40 00	120 00
Washington, . . .	2	Chester,	2	60 00	120 00
Wendell,	1	Orange,	1	40 00	40 00
West Brookfield, .	36	Warren,	30	40 00	1,153 00
“ “		Ware,	3	40 00	120 00
“ “		Brookfield,	2	25 00	50 00
“ “		Hardwick,	1	50 00	50 00
West Stockbridge, .	21	Pittsfield,	16	36 00	529 20
“ “		Great Barrington,	5	54 00	270 00
Whately,	2	Northampton,	2	60 00	120 00
Wilbraham,	25	Springfield (Technical),	17	100 00	812 50
“		Springfield (Commercial),	3	100 00	150 00
“		Springfield (Central),	2	100 00	100 00
“		Palmer,	1	50 00	25 00
“		Ludlow,	2	40 00	40 00
Windsor,	8	Adams,	1	36 00	36 00
“		Pittsfield,	1	36 00	36 00

High school tuition reimbursements, etc. — Concluded.

Towns.	Total number of pupils from each town.	High schools attended.	Number of pupils attending each high school.	Rate per year.	Amounts.
Windsor— <i>Con.</i>		Dalton,	6	\$36 00	\$216 00
Worthington, .	7	Springfield (Central),	1	100 00	100 00
" .		Dalton,	2	36 00	72 00
" .		Worcester (South),	1	70 00	35 00
" .		Northampton,	3	60 00	180 00
Totals (88 towns),	1,113	78 schools,	1,113	\$50 97	\$47,711 00

VI. REGISTRATION OF TEACHERS.

Chapter 731 of the Acts of 1911, as amended by chapter 368 of the Acts of 1913, provides that "Any graduate of any high school or normal school in this commonwealth, or of any other school considered by the board of education to be of equal grade, or the graduate of any reputable college, provided that such graduate is a person of good character" may, upon the payment of a fee of \$2, register with the Board of Education as an applicant for a position as teacher.

In accordance with this law, the Board of Education maintains a Registration Bureau to receive and act upon applications for positions as teachers. This Bureau distributes from time to time to superintendents of schools lists which give a brief statement of the teaching experience and qualifications of applicants. Additional information regarding candidates for any position is furnished to prospective employers, on their request. The Registration Bureau desires to aid as far as possible school committees and superintendents in filling positions, but sends names of teachers only at the request of the employer. The co-operation of employers of teachers will greatly enhance the service rendered by the Bureau.

The results of the operation of the law, as administered by the Bureau of the Board, is shown by the following statistics. Since October, 1912, 101 positions have been filled through the Bureau, as follows:—

Superintendents of schools,	3
High school principals,	9
Elementary school principals,	2
High school teachers,	27
Elementary school teachers,	52
Special positions,	8

Teachers registered on Dec. 31, 1913: —

High school teachers,	142
Elementary school teachers,	149
Special teachers,	73

Experience thus far warrants the conclusion that this agency of the Board of Education can be of increasing service to both teachers and school committees, and that it can be a helpful influence in promoting the efficiency of the public schools.

VII. CERTIFICATION OF SUPERINTENDENTS OF SCHOOLS.

Chapter 215 of the Acts of 1904 provides that the Board of Education shall determine the qualifications of candidates for the position of superintendent of schools in a union and requires that, as a condition of eligibility to election as superintendent of schools in a union, the applicant shall hold a certificate of fitness from the Board of Education.

Heretofore the Board has granted to persons found qualified a term certificate, valid for one, three or five years, renewable upon application unless reasons to the contrary appeared.

This term certificate is no longer to be issued, although it may be renewed to holders who received it prior to July 1, 1913, and who are in service as superintendents in Massachusetts.

Beginning with July 1, 1913, applicants who pass the examination for union superintendents as prescribed by the Board are given a preliminary certificate, valid for two years and renewable once.

A third form of certificate, known as the permanent certificate, is granted to holders of preliminary or term certificates who meet the requirements as given below.

A full statement of the present plan of certification for superintendents of schools in unions is as follows: —

I. *Term Certificate.*

A *Term Certificate* is for one, three or five years, as determined by the Board of Education. This certificate is renewable at the pleasure of the Board of Education, and is available only for persons who secured certification as union superintendents prior to July 1, 1913, and during service as superintendents of schools in Massachusetts.

II. *Preliminary Certificate.*

A *Preliminary Certificate*, valid for two years,¹ shall be granted to candidates who meet the following requirements: completion of a college or normal school course or its equivalent; familiarity with educational theory, principles, practice and history, and with the school law of Massachusetts, and at least two years' experience in teaching or supervision. In addition, an examination must be passed in the following subjects: —

School laws of Massachusetts.

School organization, administration and supervision.

History of education.

Courses and methods in rural schools, including agriculture.

Courses and methods in small high schools.

This certificate is renewable once without examination for superintendents in service in Massachusetts.

III. *Permanent (Life) Certificate.*

A *Permanent (Life) Certificate* shall be granted to any superintendent of schools in service in Massachusetts, on the following conditions: —

1. *Prior Certification.* — The holding of a superintendent's term or preliminary certificate granted by the Board of Education.

2. *Experience.* — Successful service as superintendent of schools in Massachusetts for at least two continuous years. The Board may require a report on the work of the applicant from representatives of the Board.

¹ The two years shall date from the time the holder of certificate enters on his work as a superintendent in Massachusetts.

3. *Professional Study and Training.* — (a) Completion of studies in educational theory equivalent to a semester course.¹ This requirement may be met by attendance on regular courses, including those of summer sessions in an approved institution, namely, college, university or normal school.

(b) Presentation of a thesis on some topic in school supervision, school organization or management. This paper is to be based on a knowledge of actual school conditions; must be satisfactory to the Board of Education; and is to be prepared after the applicant has secured his term or preliminary certificate. It is desirable that the thesis should be written after some experience in supervision.

IV. *Revocation of Certificate.*

The Board of Education reserves the right to revoke any certificate when, after investigation, it is convinced that the holder thereof is incompetent or is manifestly unfitted to serve as a superintendent of schools.

The results of the qualifying examinations of superintendents of schools for each year are as follows: —

YEAR.	Number certificated.	YEAR.	Number certificated.
1904,	7	1909,	21
1905,	14	1910,	19
1906,	23	1911,	7
1907,	15	1912,	21
1908,	10	1913,	15

Of these, 62 have entered the service and are now at work.

¹ A semester course consists of three exercises per week for a term of eighteen to twenty weeks. Two courses in any approved summer school of at least five weeks' session shall be considered equivalent to a semester course.

VIII. LIST OF SUPERINTENDENTS, ALPHABETICALLY ARRANGED,
WITH THEIR SUPERINTENDENCIES.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Abbott, Winthrop P., .	\$2,000	Greenfield, . .	Greenfield.
Adams, Charles F., .	1,600	Spencer, . . .	Spencer.
Aldrich, George I., .	4,500	Brookline, . . .	Brookline.
Allen, Herbert L., .	1,650	Dalton,	Dalton.
Allison, J. Francis, .	1,800	Great Barrington, .	Great Barrington.
Andrew, William W., .	2,500	Salem,	Salem.
Anthony, John C., .	2,800	Melrose,	Melrose.
Armstrong, George P.,	2,650	Belmont,	Bedford, Belmont, Burlington.
Atwell, Francoello G.,	2,050	Hopedale, . . .	Bellingham, Hopedale, Mendon.
Atwell, Willard B., .	2,100	Wakefield, . . .	Wakefield.
Bagnall, Francis A., .	2,500	Adams,	Adams.
Barbour, Albert L., .	3,200	Quincy,	Quincy.
Bates, Charles H., .	2,200	Middleborough, .	Middleborough.
Belisle, Hector L., .	3,500	Fall River, . . .	Fall River.
Bemis, George M., .	2,000	Andover,	Andover.
Benedict, Frank H., .	1,600	Cochituate, . . .	Dover, Sudbury, Wayland.
Blodgett, Samuel F., .	1,600	Randolph, . . .	Avon, Holbrook, Randolph.
Bowman, Mortimer H.,	1,600	Dighton,	Berkley, Dighton, Rehoboth.
Bramhall, Robert I., .	1,500	Holden,	Holden, Oakham, Paxton, Rutland.
Brick, Francis S., .	1,730	Maynard,	Boxborough, Maynard, Stow.
Brooks, John D., .	2,000	Natick,	Natick.
Bryce, Catherine T., Ass't,	2,400	Newtonville, . .	Newton.
Burke, J. E., Ass't, .	5,496	Boston,	Boston.
Carfrey, J. H., . . .	1,800	Franklin,	Franklin, Wrentham.
Carr, Ernest P., . . .	1,900	Marlborough, . .	Marlborough.
Carver, Arthur H., ¹ .	2,200	Lexington, . . .	Lexington.
Caswell, Almorin O., .	1,850	Milford,	Milford.
Chace, Seth Howard, .	2,500	Beverly,	Beverly.
Chaffin, W. E., . . .	1,700	Egypt,	Duxbury, Marshfield, Scituate.
Chester, J. D. W., ¹ .	1,500	Nahant,	Nahant.
Chidester, Albert J., .	1,500	Warren,	Holland, Wales, Warren.
Churchill, Samuel B.,	1,500	Stockbridge, . .	Stockbridge.
Clapp, George I., . .	2,200	Woburn,	Woburn.
Clark, Charles S., . .	3,500	Somerville, . . .	Somerville.
Clarke, George B., . .	1,500	Lanesborough, . .	Cheshire, Hancock, Lanesborough, New Ashford.

¹ Also principal of high school.

List of superintendents, alphabetically arranged, with their superintendencies — Continued.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Clay, Charles L., . . .	\$1,500	North Dana, . . .	Dana, Greenwich, New Salem, Prescott.
Clerk, Frederick E., . . .	2,000	Clinton, . . .	Clinton.
Cobb, Edwin S., . . .	2,000	Winchendon, . . .	Ashburnham, Winchendon.
Cole, Albert S., . . .	1,700	North Dartmouth, . . .	Dartmouth.
Congdon, F. K., . . .	2,500	Northampton, . . .	Northampton.
Corbin, F. E., ¹ . . .	2,250	Southbridge, . . .	Southbridge.
Cox, George W., . . .	2,000	Ware, . . .	Ware.
Crowell, Charles A., Jr., . . .	1,800	Vineyard Haven, . . .	Chilmark, Edgartown, Gay Head, Oak Bluffs, Tisbury, West Tisbury.
Dame, Dana P., ¹ . . .	2,100	North Andover, . . .	North Andover.
Davis, John C., . . .	2,000	Canton, . . .	Canton.
Davison, Frank P., . . .	1,800	Turners Falls, . . .	Montague.
De Coudres, Thomas H., . . .	1,700	Grafton, . . .	Grafton, Upton.
DeMeyer, John E., . . .	2,200	Abington, . . .	Abington, Bridgewater.
Dempey, Clarence H., . . .	3,500	Haverhill, . . .	Haverhill.
Douglas, Frank A., ² . . .	2,500	Winthrop, . . .	Winthrop.
Drown, Carroll H., . . .	1,750	West Medway, . . .	Holliston, Medway, Sherborn.
Dyer, Franklin B., . . .	10,000	Boston, . . .	Boston.
Eaton, Charles M., ¹ . . .	2,200	Weston, . . .	Weston.
Edgerly, Joseph G., . . .	3,500	Fitchburg, . . .	Fitchburg.
Eldredge, William F., . . .	1,400	Rockport, . . .	Rockport.
Eldridge, Albert G., . . .	1,800	Blackstone, . . .	Blackstone, Seekonk.
Evans, Osmon C., . . .	1,500	115 Lincoln Street, Worcester.	Auburn, Sutton.
Fales, Lewis A., . . .	2,300	Attleborough, . . .	Attleborough.
Farley, George L., . . .	3,250	Brockton, . . .	Brockton.
Fausey, John R., . . .	2,300	West Springfield, . . .	West Springfield.
Fellows, Ernest W., . . .	2,300	Framingham, . . .	Framingham.
Ferguson, Chauncey C., . . .	2,000	Millbury, . . .	Millbury, Oxford.
Fish, Charles E., . . .	1,600	Amesbury, . . .	Amesbury.
Fitts, Edward P., . . .	1,800	Mansfield, . . .	Mansfield, Sharon, Stoughton.
Fitts, Austin H., . . .	2,100	Norwood, . . .	Norwood.
Fitzgerald, Michael E., . . .	5,000	Cambridge, . . .	Cambridge.
Frost, Gaius B., . . .	1,700	Georgetown, . . .	Boxford, Georgetown, Groveland, Rowley.
Fuller, Robert J., . . .	2,200	North Attleborough, . . .	North Attleborough.
Galger, George H., . . .	1,800	Hyannis, . . .	Barnstable.
Gardner, Harry E., . . .	1,500	Hinsdale, . . .	Hinsdale, Peru, Washington, Windsor.

¹ Also principal of high school.² Also principal of grammar school.

List of superintendents, alphabetically arranged, with their superintendencies — Continued.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Goodhue, Elbridge W., .	\$1,500	Haydenville, . .	Chesterfield, Williamsburg, Worthington.
Graves, Frank K., . .	1,600	Provincetown, . .	Provincetown, Truro, Wellfleet.
Gray, John C., . . .	2,700	Chicopee,	Chicopee.
Grout, Edgar H., . . .	1,700	East Bridgewater, .	East Bridgewater, West Bridge- water.
Guabee, Walter E., . .	1,900	Ludlow,	Agawam, Ludlow.
Haines, T. M.,	1,500	Rockland,	Rockland.
Hall, I. Freeman, . . .	2,500	North Adams, . . .	North Adams.
Hall, Wells A., ¹	2,500	Concord,	Concord.
Hardy, A. L.,	2,050	Amherst,	Amherst, Pelham.
Harrington, Arthur C., .	1,500	North Adams, Box 83,	Clarksburg, Florida, Monroe, Savoy.
Harris, Charles A., . .	2,000	Plymouth,	Plymouth.
Harrub, H. W.,	2,500	Taunton,	Taunton.
Hayes, James S., . . .	1,600	Rockland,	Hanover, Hanson, Norwell.
Haynes, Edwin L., . . .	2,000	Methuen,	Methuen.
Herron, Schuyler F., . .	2,750	Winchester,	Winchester.
Hill, Frank H.,	2,000	Littleton,	Acton, Carlisle, Littleton, West- ford.
Hine, Roderick W., . . .	2,200	Dedham,	Dedham.
Hobson, Clifton H., . .	1,900	Palmer,	Palmer.
Holman, Carl,	2,000	Falmouth,	Falmouth.
Hopkins, L. Thomas, . .	1,500	Yarmouth Port, . .	Brewster, Dennis, Yarmouth.
Howard, Elmer F., . . .	1,800	East Northfield, . .	Gill, Leyden, Northfield, War- wick.
Howard, Nelson G., . . .	2,600	Hingham,	Hingham, Hull.
Humphrey, Chester W., .	2,000	Rochester,	Carver, Lakeville, Raynham, Rochester.
Jenkins, Ira A.,	1,650	Foxborough,	Foxborough, Norton, Plainville.
Johnson, Frank C., . . .	2,000	Ayer,	Ayer, Boylston, Shirley, West Boylston.
Johnson, William F., . .	2,500	Wellesley Hills, . .	Wellesley.
Jones, Asa M.,	1,800	Baldwinsville, . . .	Hubbardston, Phillipston, Roy- alston, Templeton.
Judkins, Clarence L., . .	1,900	Barre,	Barre, Hardwick, Petersham.
Keith, Allen P.,	4,000	New Bedford,	New Bedford.
Keyes, A. H.,	2,400	Needham,	Needham.
King, Theodore W., . . .	1,600	West Stockbridge, . .	Alford, Egremont, Richmond, West Stockbridge.
Kingman, Frederic W., .	2,150	Walpole,	Walpole.
Knight, Herman C., . . .	1,700	Townsend,	Ashby, Lunenburg, Townsend.
Knox, Herman N.,	1,700	Wareham,	Marion, Wareham.
Lamb, Charles B.,	1,400	Lancaster,	Lancaster.
Lamphrey, Leila M., Ass't,	1,900	Lawrence,	Lawrence.

¹ Also principal of high school.

List of superintendents, alphabetically arranged, with their superintendencies — Continued.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Lary, Stanley C., ¹	\$2,000	Cohasset, . . .	Cohasset.
Lewis, Alvan R., . . .	1,500	Belchertown, . . .	Belchertown, Enfield.
Lewis, Homer P., . . .	4,250	Worcester, . . .	Worcester.
Lewis, Mary A., Ass't.	1,350	Cambridge, . . .	Cambridge.
Loring, Everett G., . . .	1,650	Kingston, . . .	Halifax, Kingston, Pembroke, Plympton.
Lyman, C. S., . . .	2,100	Hudson, . . .	Hudson, Lincoln.
MacDougall, James A., . . .	2,600	Westfield, . . .	Westfield.
Mackin, John C., ² . . .	1,800	Manchester, . . .	Manchester.
Mahoney, John J., Ass't.	2,500	Cambridge, . . .	Cambridge.
Manning, John H., . . .	1,550	Groton, . . .	Groton.
Marsh, Frank M., . . .	3,000	Milton, . . .	Milton.
Marshall, Farnsworth G., . . .	2,700	Malden, . . .	Malden.
Marston, John P., ¹ . . .	2,400	Ipswich, . . .	Ipswich.
Martin, Benjamin E., . . .	1,600	Chelmsford, . . .	Chelmsford.
Martin, Robert W., . . .	1,600	Ashfield, . . .	Ashfield, Cummington, Goshen, Plainfield.
McCann, Josiah S., . . .	1,700	Granville, . . .	Granville, Sandisfield, South- wick, Tolland.
McSherry, Thomas Francis.	3,000	Holyoke, . . .	Holyoke.
Melcher, S. A., ¹ . . .	2,350	Whitinsville, . . .	Northbridge.
Merriam, Burr J., . . .	2,000	Marblehead, . . .	Marblehead.
Merrill, Leon O., . . .	1,500	Huntington, . . .	Blandford, Huntington, Mont- gomery, Russell.
Miller, William D., . . .	2,000	Easthampton, . . .	Easthampton, Southampton, Westhampton.
Millington, William H., . . .	1,800	447 Prospect Street, Fall River.	Freetown, Westport.
Mitchell, Walter G., . . .	1,200	Williamstown, . . .	Williamstown.
Molloy, Hugh J., . . .	3,300	Lowell, . . .	Lowell.
Morse, Frank P., ³ . . .	2,200	Revere, . . .	Revere.
Mugan, Mary A. S., Ass't.	1,800	Fall River, . . .	Fall River.
Nickerson, Fred H., . . .	3,000	Medford, . . .	Medford.
Nims, Wesley E., . . .	1,700	Orange, . . .	Orange.
Parker, Walter S., Ass't.	5,496	Boston, . . .	Boston.
Parkinson, William D., . . .	2,500	Waltham, . . .	Waltham.
Parlin, Frank E., . . .	2,500	Chelsea, . . .	Chelsea.
Paull, Austin R., . . .	1,900	Pepperell, . . .	Bolton, Dunstable, Harvard, Pepperell.
Pearson, Parker T., . . .	2,150	East Weymouth, . . .	Weymouth.
Peaslee, Frank J., . . .	3,000	Lynn, . . .	Lynn.
Pennell, Charles M., . . .	1,700	Uxbridge, . . .	Douglas, Uxbridge.

¹ Also principal of high school.² Also principal of grammar school.³ Vacancy. Principal of high school, Acting-Superintendent.

List of superintendents, alphabetically arranged, with their superintendencies — Continued.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Persons, Claire G., . . .	\$2,800	Pittsfield, . . .	Pittsfield.
Poland, Mary L., . . .	1,650	15 Myrtle Street, Springfield.	East Longmeadow, Hampden, Longmeadow, Wilbraham.
Pratt, Henry H., . . .	1,500	North Brookfield, .	Brookfield, North Brookfield.
Price, Wilfred H., . . .	2,200	Watertown, . . .	Watertown.
Prior, Charles F., . . .	2,250	Fairhaven, . . .	Acushnet, Fairhaven, Matta- poisett.
Prior, Leon E., . . .	1,500	Charlemont, . . .	Charlemont, Hawley, Heath, Rowe.
Putney, Freeman, . . .	2,300	Gloucester, . . .	Gloucester.
Putney, Walter K., . . .	1,600	Lee, . . .	Lee, Monterey, Otis, Tyringham.
Rafter, Augustine L., Ass't,	5,496	Boston, . . .	Boston.
Randall, Charles L., . . .	2,100	97 18th Street, Lowell,	Dracut, North Reading, Tewks- bury, Tyngsborough, Wilming- ton.
Reynolds, Fordyce T., . .	2,000	Gardner, . . .	Gardner.
Richards, Clinton J., . .	1,700	22 Prospect Avenue, Northampton.	Bernardston, Hadley, Hatfield.
Richardson, Charles C., .	1,600	Leicester, . . .	Charlton, Leicester.
Ripley, Mrs. Ellor C., Ass't,	5,496	Boston, . . .	Boston.
Robinson, Albert, . . .	2,200	Peabody, . . .	Peabody.
Robinson, Ernest W., . .	2,400	Webster, . . .	Dudley, Webster.
Safford, Adelbert L., ¹ . .	2,400	Reading, . . .	Reading.
Sanborn, Henry C., . . .	2,000	Danvers, . . .	Danvers.
Sanderson, William H., . .	1,700	Chester, . . .	Becket, Chester, Middlefield.
Scully, John F., . . .	2,600	Arlington, . . .	Arlington.
Sheridan, Bernard M., . .	3,500	Lawrence, . . .	Lawrence.
Sims, William F., . . .	2,000	Saugus, . . .	Saugus.
Small, Alberto W., . . .	1,700	110 State Street, New- buryport.	Merrimac, Newbury, Salisbury, West Newbury.
Smith, Arthur W., . . .	1,500	Shelburne Falls, . .	Buckland, Colrain, Shelburne.
Smith, Eldridge, ² . . .	1,500	54 Boylston Street, Cambridge.	Hamilton, Swampscott.
Spaulding, Frank E., . . .	5,000	Newtonville, . . .	Newton.
Stacy, Chester R., . . .	2,000	North Easton, . . .	Easton.
Stearns, Mrs. Cora A., . .	1,550	Wendell Depot, . .	Erving, Leverett, Shutesbury, Wendell.
Stiles, Chester D., . . .	1,700	South Deerfield, . .	Conway, Deerfield, Sunderland, Whately.
Stone, Melville A., . . .	1,550	West Brookfield, . .	New Braintree, Sturbridge, West Brookfield.
Thompson, Frank V., Ass't,	5,496	Boston, . . .	Boston.
Thompson, Thomas E., ³ . .	2,200	Leominster, . . .	Leominster.
Tirrell, Edwin S., ¹ . . .	1,400	Nantucket, . . .	Nantucket.
Tower, Alfred O., . . .	1,600	Sheffield, . . .	Mount Washington, New Marl- borough, Sheffield.

¹ Also principal of high school.

² Three days per week.

³ On leave of absence. George F. Ellinwood, Acting-Superintendent.

List of superintendents, alphabetically arranged, with their superintendencies — Concluded.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Tucker, Charles A., . .	\$1,700	Lenox, . . .	Lenox.
Van Ornum, Frederick B.,	1,800	Northborough, . .	Berlin, Northborough, Shrewsbury, Southborough.
Van Sickle, James H., .	5,000	Springfield, . . .	Springfield.
Waldron, Harry C., . .	1,500	23 Vine Street, Leominster.	Princeton, Sterling, Westminster.
Walter, Charles W., . .	1,500	Hopkinton, . . .	Ashland, Hopkinton.
Ward, W. Scott, . . .	2,000	Athol, . . .	Athol.
Webber, Arthur B., . .	2,200	Stoneham, . . .	Billerica, Stoneham.
West, Melvin J., . . .	1,800	Millis, . . .	Medfield, Millis, Norfolk, Westwood.
Wheeler, Frederic A., .	1,800	Monson, . . .	Brimfield, Monson.
White, Maurice P., Ass't, .	5,496	Boston, . . .	Boston.
Whitman, Herbert L., .	1,650	Sandwich, . . .	Bourne, Mashpee, Sandwich.
Whitney, Fairfield, . .	2,600	Everett, . . .	Everett.
Whittemore, Frederic E., .	1,750	South Hadley Falls, .	Granby, South Hadley.
Wiggin, Ralph L., . . .	1,900	South Braintree, .	Braintree.
Willard, Edgar L., . . .	1,800	Newburyport, . . .	Newburyport.
Williams, Frederick F., .	1,800	199 North Main Street, Fall River.	Somerset, Swansea.
Williams, Harvey R., . .	2,000	Wenham, . . .	Essex, Lynnfield, Middleton, Topsfield, Wenham.
Williams, Loring G., . .	1,900	Harwich, . . .	Chatham, Eastham, Harwich, Orleans.
Wilson, Earle E., ¹ . . .	1,700	Westborough, . . .	Westborough.
Wyman, Elwood T., . .	2,000	Whitman, . . .	Whitman.
(Total, 195.)			

¹ Also principal of high school.

IX. TABLE OF SUPERINTENDENCY UNIONS.

Index to towns in the table.

[NOTE. — The number preceding the name of the town is that of the superintendency union in which the town is to be found in the following table.]

15 Abington.	36 Carlisle.
36 Acton.	53 Carver.
31 Acushnet.	32 Charlemont.
62 Agawam.	59 Charlton.
57 Alford.	25 Chatham.
40 Amherst.	49 Cheshire.
67 Ashburnham.	7 Chester.
33 Ashby.	56 Chesterfield.
38 Ashfield.	28 Chilmark.
3 Ashland.	75 Clarksburg.
51 Auburn.	16 Colrain.
43 Avon.	61 Conway.
69 Ayer.	38 Cummington.
5 Barre.	50 Dana.
7 Becket.	61 Deerfield.
39 Bedford.	19 Dennis.
65 Belchertown.	58 Dighton.
24 Bellingham.	44 Douglas.
39 Belmont.	34 Dover.
58 Berkley.	11 Dracut.
6 Berlin.	64 Dudley.
41 Bernardston.	68 Dunstable.
71 Billerica.	1 Duxbury.
76 Blackstone.	18 East Bridgewater.
42 Blandford.	25 Eastham.
68 Bolton.	4 Easthampton.
17 Bourne.	21 East Longmeadow.
60 Boxborough.	28 Edgartown.
29 Boxford.	57 Egremont.
69 Boylston.	65 Enfield.
19 Brewster.	45 Erving.
15 Bridgewater.	52 Essex.
8 Brimfield.	31 Fairhaven.
12 Brookfield.	75 Florida.
16 Buckland.	73 Foxborough.
39 Burlington.	74 Franklin.

Superintendency Unions — Continued.

72 Freetown.
28 Gay Head.
29 Georgetown.
27 Gill.
38 Goshen.
13 Grafton.
26 Granby.
63 Granville.
50 Greenwich.
29 Groveland.
41 Hadley.
48 Halifax.
21 Hampden.
49 Hancock.
22 Hanover.
22 Hanson.
5 Hardwick.
68 Harvard.
25 Harwich.
41 Hatfield.
32 Hawley.
32 Heath.
47 Hinsdale.
43 Holbrook.
37 Holden.
20 Holland.
30 Holliston.
24 Hopedale.
3 Hopkinton.
2 Hubbardston.
42 Huntington.
48 Kingston.
53 Lakeville.
49 Lanesborough.
46 Lee.
59 Leicester.
45 Leverett.
27 Leyden.
36 Littleton.

21 Longmeadow.
62 Ludlow.
33 Lunenburg.
52 Lynnfield.
10 Mansfield.
1 Marshfield.
17 Mashpee.
31 Mattapoisett.
60 Maynard.
54 Medfield.
30 Medway.
24 Mendon.
66 Merrimac.
7 Middlefield.
52 Middleton.
14 Millbury.
54 Millis.
75 Monroe.
8 Monson.
46 Monterey.
42 Montgomery.
55 Mount Washington.
49 New Ashford.
35 New Braintree.
66 Newbury.
55 New Marlborough.
50 New Salem.
54 Norfolk.
6 Northborough.
12 North Brookfield.
27 Northfield.
11 North Reading.
73 Norton.
22 Norwell.
28 Oak Bluffs.
37 Oakham.
25 Orleans.
46 Otis.
14 Oxford.

Superintendency Unions — Continued.

37 Paxton.	63 Southwick.
40 Pelham.	9 Sterling.
48 Pembroke.	71 Stoneham.
68 Pepperell.	10 Stoughton.
47 Peru.	60 Stow.
5 Petersham.	35 Sturbridge.
2 Phillipston.	34 Sudbury.
38 Plainfield.	61 Sunderland.
73 Plainville.	51 Sutton.
48 Plympton.	70 Swansea.
50 Prescott.	2 Templeton.
9 Princeton.	11 Tewksbury.
23 Provincetown.	28 Tisbury.
43 Randolph.	63 Tolland.
53 Raynham.	52 Topsfield.
58 Rehoboth.	33 Townsend.
57 Richmond.	23 Truro.
53 Rochester.	11 Tyngsborough.
32 Rowe.	46 Tyringham.
29 Rowley.	13 Upton.
2 Royalston.	44 Uxbridge.
42 Russell.	20 Wales.
37 Rutland.	20 Warren.
66 Salisbury.	27 Warwick.
63 Sandisfield.	47 Washington.
17 Sandwich.	34 Wayland.
75 Savoy.	64 Webster.
1 Scituate.	23 Wellfleet.
76 Seekonk.	45 Wendell.
10 Sharon.	52 Wenham.
55 Sheffield.	69 West Boylston.
16 Shelburne.	18 West Bridgewater.
30 Sherborn.	35 West Brookfield.
69 Shirley.	36 Westford.
6 Shrewsbury.	4 Westhampton.
45 Shutesbury.	9 Westminster.
70 Somerset.	66 West Newbury.
4 Southampton.	72 Westport.
6 Southborough.	57 West Stockbridge.
26 South Hadley.	28 West Tisbury.

Superintendency Unions — Continued.

54 Westwood.	67 Winchendon.
61 Whately.	47 Windsor.
21 Wilbraham.	56 Worthington.
56 Williamsburg.	74 Wrentham.
11 Wilmington.	19 Yarmouth.

Superintendency Unions — Continued.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1912.	Number of schools, 1912-13.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
1	Duxbury, . . .	1888	\$3,172,073	11	$\frac{1}{8}$	\$250 00	\$416 67	\$1,700 00
	Marshfield, . . .	1888	2,661,386	8	$\frac{1}{8}$	250 00	416 67	
	Scituate, . . .	1888	5,132,004	12	$\frac{1}{8}$	250 00	-	
2	Hubbardston, . . .	1889	768,695	8	$\frac{3}{10}$	150 00	250 00	1,800 00
	Phillipston, . . .	1889	286,955	4	$\frac{1}{10}$	75 00	125 00	
	Royalston, . . .	1889	696,100	8	$\frac{3}{10}$	150 00	250 00	
	Templeton, . . .	1889	1,824,912	17	$\frac{3}{10}$	375 00	625 00	
3	Ashland, . . .	1889	1,461,022	9	$\frac{3}{8}$	300 00	500 00	1,500 00
	Hopkinton, . . .	1889	1,756,502	12	$\frac{3}{8}$	450 00	750 00	
4	Easthampton, . . .	1889	6,424,918	27	$\frac{12}{90}$	450 00	-	2,000 00
	Southampton, . . .	1889	498,905	8	$\frac{9}{90}$	187 50	312 50	
	Westhampton, . . .	1889	264,546	5	$\frac{9}{90}$	112 50	187 50	
5	Barre, . . .	1890	2,502,540	14	$\frac{3}{8}$	300 00	500 00	1,900 00
	Hardwick, . . .	1890	3,002,180	15	$\frac{3}{8}$	300 00	500 00	
	Petersham, . . .	1890	1,105,180	6	$\frac{1}{8}$	150 00	250 00	
6	Berlin, . . .	1890	607,760	6	$\frac{1}{4}$	107 14	178 56	1,800 00
	Northborough, . . .	1890	1,416,640	7	$\frac{3}{4}$	214 28	357 14	
	Shrewsbury, . . .	1890	2,401,257	13	$\frac{3}{4}$	214 28	357 14	
	Southborough, . . .	1890	2,056,563	10	$\frac{3}{4}$	214 30	357 16	
7	Becket, . . .	1890	566,932	6	$\frac{185}{600}$	202 50	337 50	1,700 00
	Chester, . . .	1890	793,565	12	$\frac{269}{600}$	399 00	665 00	
	Middlefield, . . .	1890	227,829	7	$\frac{99}{600}$	148 50	247 50	
8	Brimfield, . . .	1890	581,532	7	$\frac{3}{10}$	225 00	375 00	1,800 00
	Monson, . . .	1890	1,919,430	23	$\frac{7}{10}$	525 00	875 00	
9	Princeton, . . .	1890	1,420,516	9	$\frac{1}{8}$	150 00	250 00	1,500 00
	Sterling, . . .	1890	1,234,655	12	$\frac{3}{8}$	300 00	500 00	
	Westminster, . . .	1890	944,325	12	$\frac{3}{8}$	300 00	500 00	
10	Mansfield, . . .	1891	4,180,446	24	$\frac{3}{8}$	300 00	-	1,800 00
	Sharon, . . .	1891	3,218,118	10	$\frac{1}{8}$	150 00	250 00	
	Stoughton, . . .	1891	3,893,380	23	$\frac{3}{8}$	300 00	-	
11	Dracut, . . .	1891	2,523,325	18	$\frac{9}{15}$	300 00	500 00	2,100 00
	North Reading, . . .	1891	885,254	4	$\frac{1}{15}$	50 00	83 33	
	Tewksbury, . . .	1891	1,513,840	7	$\frac{9}{15}$	150 00	250 00	
	Tyngsborough, . . .	1891	655,347	4	$\frac{1}{15}$	50 00	83 34	
	Wilmington, ¹ . . .	1911	1,709,327	13	$\frac{9}{15}$	200 00	333 33	
12	Brookfield, . . .	1891	1,353,506	14	$\frac{1}{2}$	375 00	625 00	1,500 00
	North Brookfield, . . .	1891	1,884,808	10	$\frac{1}{2}$	375 00	625 00	
13	Grafton, . . .	1891	2,920,540	21	$\frac{3}{4}$	562 50	937 50	1,700 00
	Upton, . . .	1891	1,185,546	9	$\frac{1}{4}$	187 50	312 50	
14	Millbury, . . .	1891	2,983,532	21	$\frac{3}{8}$	450 00	750 00	2,000 00
	Oxford, . . .	1891	2,051,448	17	$\frac{3}{8}$	300 00	500 00	
15	Abington, . . .	1891	3,402,628	19	$\frac{1}{2}$	375 00	625 00	2,200 00
	Bridgewater, . . .	1891	3,618,159	29	$\frac{1}{2}$	375 00	-	
16	Buckland, . . .	1892	849,428	9	$\frac{3}{10}$	225 00	375 00	1,500 00
	Colrain, . . .	1892	750,480	16	$\frac{3}{10}$	300 00	500 00	
	Shelburne, . . .	1892	1,297,690	10	$\frac{3}{10}$	225 00	375 00	
17	Bourne, . . .	1892	7,203,725	14	$\frac{9}{20}$	337 50	-	1,650 00
	Mashpee, . . .	1892	247,250	2	$\frac{9}{20}$	75 00	125 00	
	Sandwich, . . .	1892	1,184,575	10	$\frac{9}{20}$	337 50	562 50	
18	East Bridgewater, . . .	1892	2,257,623	18	$\frac{1}{2}$	375 00	625 00	1,700 00
	West Bridgewater, . . .	1892	1,534,588	15	$\frac{1}{2}$	375 00	625 00	

¹ Added in 1911.

Superintendency Unions — Continued.

Superintendent of Schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
W. E. Chaffin, Egypt,	Edgar L. Hitchcock, Marshfield Hills.	Clara M. Steele, Scituate.
Asa M. Jones, Baldwinsville,	Robert T. Bourn, Templeton,	Mrs. Rose E. Coleman (Baldwinsville), Templeton.
Chas. W. Walter, Hopkinton,	Lewis D. Drawbridge, Hopkinton.	Leon W. Davis, Ashland.
William D. Miller, Easthampton.	Rev. Franz Willer, Easthampton.	Charles N. Loud, Westhampton.
Clarence L. Judkins, Barre,	Dr. George A. Brown, Barre,	Charles O. Flagg, Hardwick.
Frederick B. Van Ornum, Northborough.	Seth H. Howes, Southborough,	Edwin S. Corey, Northborough.
William H. Sanderson, Chester.	Charles F. Pease, Chester,	Howard R. Mollineaux, Becket.
Frederic A. Wheeler, Monson,	Dr. R. V. Sawin, Brimfield,	Dr. E. W. Capen, Monson.
Harry C. Waldron, 23 Vine Street, Leominster.	Lucius W. French, Westminster.	Arthur E. Hutchinson (Jefferson R. F. D.), Holden.
Edward P. Fitts, Mansfield,	Frank H. Dunbar, Mansfield,	Washington Cook, Sharon.
Charles L. Randall, 97 18th Street, Lowell.	Edward Dennett, Dracut,	Nelson E. Huntley, Dracut Centre.
Henry H. Pratt, North Brookfield.	John W. White, North Brookfield.	James W. Wall, Brookfield.
Thomas H. De Coudres, Grafton.	Frank M. McGarry, Grafton,	Geo. W. Knowlton, Jr., West Upton.
Chauncey C. Ferguson, Millbury.	Lawrence T. Kelty, Oxford,	Edward F. Hull, Millbury.
John E. De Meyer, Abington,	Dr. Richard B. Rand, Abington.	Charles R. Fitch, Bridgewater.
Arthur W. Smith, Shelburne Falls.	Edwin Baker, Shelburne Falls,	Jonathan E. Davenport, Colrain.
Herbert L. Whitman, Sandwich.	Dr. Samuel M. Beale, Sandwich.	Anna M. Starbuck (Bourne-dale), Bourne.
Edgar H. Grout, East Bridgewater.	Clinton P. Howard, West Bridgewater.	Corelli C. Alger, West Bridgewater.

Superintendency Unions — Continued.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1912.	Number of schools, 1912-13.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
19	Brewster, ¹	1903	\$386,105	4	$\frac{4}{25}$	\$120 00	\$200 00	\$1,500 00
	Dennis,	1892	1,326,680	12	$\frac{12}{25}$	340 00	600 00	
	Yarmouth,	1892	2,472,984	9	$\frac{9}{25}$	270 00	450 00	
20	Holland, ²	1902	110,659	1	$\frac{1}{20}$	37 50	62 50	1,500 00
	Wales,	1893	291,371	2	$\frac{2}{20}$	112 50	187 50	
	Warren,	1893	2,101,986	14	$\frac{14}{20}$	600 00	1,000 00	
21	East Longmeadow,	1893	925,485	10	$\frac{10}{25}$	227 27	378 78	1,650 00
	Hampden,	1893	424,575	6	$\frac{6}{25}$	136 37	227 28	
	Longmeadow,	1893	2,133,915	5	$\frac{5}{25}$	113 63	189 39	
	Wilbraham,	1893	1,178,166	12	$\frac{12}{25}$	272 73	454 55	
22	Hanover,	1894	1,595,220	10	$\frac{1}{6}$	250 00	416 67	1,700 00
	Hanson,	1894	1,378,290	10	$\frac{1}{6}$	250 00	416 67	
	Norwell,	1894	1,115,951	8	$\frac{1}{6}$	250 00	416 66	
23	Provincetown,	1894	2,288,517	23	$\frac{23}{25}$	522 74	871 22	1,600 00
	Truro, ¹	1902	394,770	5	$\frac{5}{25}$	113 63	189 39	
	Wellfleet,	1894	1,018,655	5	$\frac{5}{25}$	113 63	189 39	
24	Bellingham,	1894	659,120	10	$\frac{1}{6}$	250 00	416 67	2,050 00
	Hopedale,	1894	5,913,632	12	$\frac{1}{6}$	250 00	—	
	Mendon,	1894	688,590	6	$\frac{1}{6}$	250 00	416 67	
25	Chatham, ¹	1903	1,294,670	9	$\frac{9}{20}$	232 76	387 93	1,900 00
	Eastham,	1894	461,942	3	$\frac{3}{20}$	77 59	129 32	
	Harwich,	1894	1,487,644	12	$\frac{12}{20}$	310 35	517 25	
	Orleans,	1894	1,913,327	5	$\frac{5}{20}$	129 30	215 50	
26	Granby,	1895	570,760	6	$\frac{1}{4}$	187 50	312 50	1,750 00
	South Hadley,	1895	3,187,050	24	$\frac{1}{4}$	562 50	937 50	
27	Gill,	1895	494,961	6	$\frac{1}{6}$	150 00	250 00	1,800 00
	Leyden, ²	1901	197,074	5	$\frac{1}{6}$	150 00	250 00	
	Northfield,	1895	1,437,732	10	$\frac{1}{6}$	300 00	500 00	
	Warwick,	1895	414,728	4	$\frac{1}{6}$	150 00	250 00	
28	Chilmark, ⁴	1897	367,279	2	$\frac{2}{20}$	75 00	125 00	1,800 00
	Edgartown,	1895	1,097,990	6	$\frac{4}{20}$	150 00	250 00	
	Gay Head, ²	1902	44,036	1	$\frac{1}{20}$	37 50	62 50	
	Oak Bluffs,	1895	1,888,650	7	$\frac{7}{20}$	187 50	312 50	
	Tisbury,	1895	1,689,088	7	$\frac{7}{20}$	187 50	312 50	
	West Tisbury,	1895	641,662	4	$\frac{4}{20}$	112 50	187 50	
29	Boxford, ⁵	1912	1,525,798	6	$\frac{1}{6}$	150 00	250 00	1,700 00
	Georgetown,	1895	1,245,032	8	$\frac{1}{6}$	150 00	250 00	
	Groveland,	1895	1,216,595	12	$\frac{1}{6}$	300 00	500 00	
	Rowley,	1895	2,422,011	8	$\frac{1}{6}$	150 00	250 00	
30	Holliston,	1896	1,968,537	13	$\frac{2}{5}$	300 00	500 00	1,750 00
	Medway,	1896	1,716,265	13	$\frac{2}{5}$	300 00	500 00	
	Sherborn,	1896	1,611,330	8	$\frac{1}{6}$	150 00	250 00	
31	Acushnet,	1897	1,007,140	8	$\frac{1}{6}$	125 00	208 34	2,250 00
	Fairhaven,	1897	3,887,090	20	$\frac{4}{6}$	500 00	—	
	Mattapoisett,	1897	1,996,562	6	$\frac{1}{6}$	125 00	208 33	
32	Charlemont,	1897	535,546	9	$\frac{9}{25}$	270 00	450 00	1,500 00
	Hawley,	1897	197,968	8	$\frac{8}{25}$	240 00	400 00	
	Heath, ²	1902	203,477	4	$\frac{4}{25}$	90 00	150 00	
	Rowe,	1897	211,624	5	$\frac{5}{25}$	150 00	250 00	
33	Ashby,	1897	586,382	5	$\frac{2}{10}$	150 00	250 00	1,700 00
	Lunenburg, ⁶	1905	1,336,328	8	$\frac{8}{10}$	225 00	375 00	
	Townsend,	1897	1,347,400	8	$\frac{8}{10}$	375 00	625 00	

¹ Added Oct. 17, 1903, by decree of State Board of Education.² Added in 1902.⁴ Added in 1897.⁵ Added May 16, 1905, by decree of State Board of Education.³ Added in 1901.⁶ Added in 1912.

Superintendency Unions — Continued.

Superintendent of Schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
L. Thomas Hopkins, Yarmouth Port.	Edmund W. Eldridge, Yarmouth.	Louis A. Crowell, East Dennis.
Albert J. Chidester, Warren,	Dr. John E. Dalton, Warren,	Rev. Olney I. Darling, Warren.
Mary L. Poland, 15 Myrtle Street, Springfield.	Mervin H. Pease, Ludlow, R. F. D. No. 2.	Evanore O. Beebe, North Wilbraham.
James S. Hayes, Rockland, .	Dr. Clarence L. Howes, Hanover.	Carrie M. Ford, Norwell.
Frank K. Graves, Provincetown.	A. T. Williams, Provincetown,	John B. Dyer, Truro.
Francello G. Atwell, Hopedale,	Henry W. Gaskill, Mendon, .	Frank J. Dutcher, Hopedale,
Loring G. Williams, Harwich,	John P. Nickerson, Harwich,	Hermann Taylor, Chatham.
Frederic E. Whittemore, South Hadley Falls.	Dr. William E. Phillips, Granby.	Mrs. Ada W. Gray, Granby.
Elmer F. Howard, East Northfield.	R. L. Watson (Mt. Hermon), Northfield.	W. W. Coe, Northfield.
Charles A. Crowell, Jr., Vineyard Haven.	Ulysses E. Mayhew, West Tisbury.	Anson M. Luce (Vineyard Haven), Tisbury, R. F. D. No. 1.
Gaius B. Frost, Georgetown,	A. L. Wales, Groveland, .	C. A. Holmes, Georgetown.
Carroll H. Drown, West Medway.	Charles A. Gardner, Holliston,	Charles M. Smith, West Medway.
Charles F. Prior, Fairhaven, .	Lemuel Le Baron Dexter, Mattapoisett.	Walter E. Tripp, Acushnet.
Leon E. Prior, Charlemont, .	J C. Burrington, Charlemont,	Mrs. Mary Upson Avery, Charlemont.
Herman C. Knight, Townsend.	George A. Wilder, Townsend,	James L. Harrington, Lunenburg.

Superintendency Unions — Continued.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1912.	Number of schools, 1912-13.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
34	Dover,	1898	\$6,288,937	5	$\frac{3}{10}$	\$150 00	—	\$1,600 00
	Sudbury, . . .	1898	1,360,696	7	$\frac{3}{10}$	225 00	\$375 00	
	Wayland, . . .	1898	3,177,080	11	$\frac{3}{10}$	375 00	625 00	
35	New Braintree, .	1898	403,445	4	$\frac{3}{10}$	225 00	375 00	1,550 00
	Sturbridge, . .	1898	1,019,130	11	$\frac{3}{10}$	300 00	500 00	
	West Brookfield, .	1898	939,477	7	$\frac{3}{10}$	225 00	375 00	
36	Acton,	1898	2,425,330	11	$\frac{11}{40}$	206 25	343 75	2,000 00
	Carlisle, ¹ . . .	1911	478,419	3	$\frac{3}{40}$	75 00	125 00	
	Littleton, . . .	1898	1,169,193	7	$\frac{3}{40}$	150 00	250 00	
	Westford, . . .	1898	2,148,092	15	$\frac{11}{40}$	318 75	531 25	
37	Holden,	1900	1,781,958	16	$\frac{19}{50}$	375 00	625 00	1,500 00
	Oakham,	1900	380,799	5	$\frac{3}{50}$	112 50	187 50	
	Paxton,	1900	383,388	3	$\frac{3}{50}$	75 00	125 00	
	Rutland,	1900	781,464	7	$\frac{3}{50}$	187 50	312 50	
38	Ashfield, . . .	1900	724,342	10	$\frac{19}{50}$	288 46	490 76	1,600 00
	Cummington, . .	1900	336,399	8	$\frac{3}{50}$	230 76	384 60	
	Goshen,	1900	208,529	3	$\frac{3}{50}$	86 54	144 24	
	Plainfield, . . .	1900	194,164	5	$\frac{3}{50}$	144 24	240 40	
39	Bedford,	1900	1,669,495	4	$\frac{7}{50}$	262 50	437 50	2,650 00
	Belmont, ² . . .	1910	7,539,455	27	$\frac{49}{50}$	375 00	—	
	Burlington, . . .	1900	775,456	3	$\frac{3}{50}$	112 50	187 50	
40	Amherst,	1901	4,425,882	20	$\frac{4}{5}$	600 00	—	2,050 00
	Pelham,	1901	371,154	4	$\frac{1}{5}$	150 00	250 00	
41	Barnardston, . .	1901	467,555	6	$\frac{9}{50}$	155 17	258 62	1,700 00
	Hadley,	1901	1,743,841	12	$\frac{12}{50}$	310 35	517 25	
	Hatfield,	1901	1,636,230	11	$\frac{12}{50}$	284 48	474 13	
42	Blandford, . . .	1901	624,456	8	$\frac{9}{50}$	181 06	301 72	1,500 00
	Huntington, . . .	1901	662,780	10	$\frac{19}{50}$	258 61	431 04	
	Montgomery, . .	1901	152,367	3	$\frac{3}{50}$	77 58	129 31	
	Russell,	1901	998,105	10	$\frac{9}{50}$	232 75	387 93	
43	Avon,	1901	1,036,751	10	$\frac{19}{50}$	200 00	333 33	1,600 00
	Holbrook,	1901	1,598,007	14	$\frac{19}{50}$	250 00	416 67	
	Randolph,	1901	2,731,000	17	$\frac{19}{50}$	300 00	500 00	
44	Douglas,	1901	1,378,758	11	$\frac{3}{5}$	300 00	500 00	1,700 00
	Uxbridge,	1901	3,632,500	28	$\frac{3}{5}$	450 00	—	
45	Erving,	1901	1,017,305	7	$\frac{7}{50}$	262 50	437 50	1,550 00
	Leverett,	1901	343,793	6	$\frac{6}{50}$	225 00	375 00	
	Shutesbury, . . .	1901	270,480	3	$\frac{3}{50}$	112 50	187 50	
	Wendell,	1901	483,360	4	$\frac{7}{50}$	150 00	250 00	
46	Lee,	1901	2,408,632	15	$\frac{12}{25}$	360 00	600 00	1,600 00
	Monterey,	1901	344,103	3	$\frac{3}{25}$	150 00	250 00	
	Otis,	1901	259,383	5	$\frac{3}{25}$	150 00	250 00	
	Tyringham, . . .	1901	364,441	4	$\frac{3}{25}$	90 00	150 00	
47	Hinsdale,	1901	618,703	9	$\frac{9}{50}$	300 00	500 00	1,500 00
	Peru,	1901	145,435	3	$\frac{3}{50}$	112 50	187 50	
	Washington, ³ . .	1912	303,657	4	$\frac{4}{50}$	150 00	250 00	
	Windsor,	1901	304,430	6	$\frac{6}{50}$	187 50	312 50	
48	Halifax,	1901	650,246	3	$\frac{3}{15}$	100 00	166 67	1,650 00
	Kingston,	1901	1,650,460	13	$\frac{3}{15}$	300 00	500 00	
	Pembroke,	1901	976,345	8	$\frac{3}{15}$	250 00	416 67	
	Plympton,	1901	415,903	3	$\frac{3}{15}$	100 00	166 66	
49	Cheshire, ⁴ . . .	1912	836,738	8	$\frac{7}{50}$	262 50	437 50	1,500 00
	Hancock,	1902	388,534	4	$\frac{4}{50}$	187 50	312 50	
	Lanesborough, . .	1902	619,073	6	$\frac{7}{50}$	262 50	437 50	
	New Ashford, . . .	1902	56,480	1	$\frac{1}{50}$	37 50	62 50	

¹ Added in 1911.³ Added June 7, 1912, by decree of State Board of Education.² Added in 1910.⁴ Added in 1912.

Superintendency Unions — Continued.

Superintendent of Schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
Frank H. Benedict, Cochrasset.	Richard H. Bond, Needham, R. F. D.	Agnes Y. Rogers, Dover.
Melville A. Stone, West Brookfield.	Harold Chesson, West Brookfield.	Frances W. Tufts, New Braintree.
Frank H. Hill, Littleton,	Charles F. Johnson, Littleton,	Charles O. Prescott, Westford.
Robert I. Bramhall, Holden,	William E. Temple, Rutland,	Jennie M. Fairbanks, Holden.
Robert W. Martin, Ashfield,	William Hunter, Ashfield,	George B. Church, Shelburne Falls, R. F. D.
George P. Armstrong, Belmont.	Loring Underwood, Belmont,	Mrs. Martha S. Mason, Bedford.
A. L. Hardy, Amherst,	E. P. Bartlett, Amherst,	Charles S. Walker, Amherst.
Clinton J. Richards, 22 Prospect Avenue, Northampton.	Egbert E. Cairns, Bernardston,	Frank W. Putnam, Bernardston.
Leon O. Merrill, Huntington,	Edmund H. Cross, Huntington.	W. C. Rollins (Woronoco), Russell.
Samuel F. Blodgett, Randolph.	George W. Robbins, Avon, Box 133.	Dr. George V. Higgins, Randolph.
Charles M. Pennell, Uxbridge,	Charles W. Scott, Uxbridge,	Edward T. Buxton, East Douglas.
Mrs. Cora A. Stearns, Wendell Depot.	Nathan J. Hunting, Shutesbury.	Mrs. Effie L. Bowen, Wendell.
Walter K. Putney, Lee,	D. M. Wilcox, Lee,	J. J. Hassett, Lee.
Harry E. Gardner, Hinsdale,	Thomas A. Frissell, Hinsdale,	Thomas F. Ryan, Hinsdale.
Everett G. Loring, Kingston,	John M. Monroe (Bryantville), Pembroke, R. F. D.	Mrs. Agnes E. Manley, Plympton.
George B. Clarke, Lanesborough.	George Z. Dean, Cheshire,	Dr. Franklin C. Downing, Lanesborough.

Superintendency Unions — Continued.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1912.	Number of schools, 1912-13.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
50	Dana,	1902	\$421,386	5	$\frac{5}{18}$	\$208 33	\$347 22	\$1,500 00
	Greenwich,	1902	254,630	2	$\frac{3}{18}$	83 33	138 89	
	New Salem,	1902	371,810	6	$\frac{7}{18}$	291 67	486 11	
	Prescott,	1902	204,456	4	$\frac{4}{18}$	166 67	277 78	
51	Auburn,	1902	1,385,000	17	$\frac{1}{2}$	375 00	625 00	1,500 00
	Sutton,	1902	1,545,119	16	$\frac{1}{2}$	375 00	625 00	
52	Essex,	1902	1,242,421	8	$\frac{8}{28}$	214 28	357 14	2,000 00
	Lynnfield, ¹	1912	1,199,311	4	$\frac{4}{28}$	107 15	178 58	
	Middleton, ²	1905	886,489	4	$\frac{4}{28}$	107 15	178 58	
	Topsfield, ¹	1912	3,109,877	5	$\frac{5}{28}$	133 92	223 20	
	Wenham,	1902	2,627,900	7	$\frac{7}{28}$	187 50	312 50	
53	Carver,	1902	1,927,482	10	$\frac{10}{40}$	225 00	375 00	2,000 00
	Lakeville,	1902	1,065,200	7	$\frac{7}{40}$	188 75	281 25	
	Raynham, ¹	1912	886,123	8	$\frac{10}{40}$	187 50	312 50	
	Rochester,	1902	949,801	8	$\frac{8}{40}$	168 75	281 25	
54	Medfield, ²	1908	1,690,824	7	$\frac{1}{4}$	187 50	312 50	1,800 00
	Millis,	1902	1,347,735	7	$\frac{1}{4}$	187 50	312 50	
	Norfolk,	1902	1,046,100	6	$\frac{1}{4}$	187 50	312 50	
	Westwood,	1902	4,102,590	7	$\frac{1}{4}$	187 50	-	
55	Mt. Washington,	1902	111,810	2	$\frac{2}{50}$	75 00	125 00	1,600 00
	New Marlborough,	1902	800,860	11	$\frac{20}{50}$	285 00	475 00	
	Sheffield,	1902	1,076,340	14	$\frac{28}{50}$	390 00	650 00	
56	Chesterfield,	1902	337,763	5	$\frac{1}{4}$	187 50	312 50	1,500 00
	Williamsburg,	1902	1,080,869	14	$\frac{3}{4}$	375 00	625 00	
	Worthington,	1902	367,129	7	$\frac{1}{4}$	187 50	312 50	
57	Alford,	1902	184,863	3	$\frac{3}{10}$	118 42	197 37	1,600 00
	Egremont,	1902	490,732	3	$\frac{3}{10}$	118 42	197 37	
	Richmond,	1902	623,743	6	$\frac{6}{10}$	236 84	394 73	
	West Stockbridge,	1902	528,335	7	$\frac{7}{10}$	276 32	460 53	
58	Berkley,	1902	414,433	8	$\frac{1}{5}$	150 00	250 00	1,600 00
	Dighton,	1902	1,319,639	13	$\frac{3}{5}$	300 00	500 00	
	Rehoboth,	1902	964,489	15	$\frac{3}{5}$	300 00	500 00	
59	Charlton,	1902	1,305,988	15	$\frac{1}{2}$	375 00	625 00	1,600 00
	Leicester,	1902	2,431,015	20	$\frac{1}{2}$	375 00	625 00	
60	Boxborough,	1902	291,021	4	$\frac{1}{10}$	75 00	125 00	1,730 00
	Maynard,	1902	4,080,102	23	$\frac{23}{10}$	450 00	-	
	Stow,	1902	1,062,062	7	$\frac{7}{10}$	225 00	375 00	
61	Conway,	1903	750,456	9	26 per cent.	193 27	322 12	1,700 00
	Deerfield,	1903	2,349,851	14	42 per cent.	313 05	521 75	
	Sunderland,	1903	567,870	5	20 per cent.	153 38	255 63	
	Whately,	1903	486,394	5	12 per cent.	90 30	150 50	
62	Agawam,	1903	2,293,308	17	$\frac{2}{5}$	300 00	500 00	1,900 00
	Ludlow,	1903	4,287,204	25	$\frac{3}{5}$	450 00	-	
63	Granville,	1903	590,621	9	30 per cent.	225 00	375 00	1,700 00
	Sandisfield,	1903	381,515	6	25 per cent.	187 50	312 50	
	Southwick,	1903	841,525	11	35 per cent.	262 50	437 50	
	Tolland,	1903	251,902	1	10 per cent.	75 00	125 00	
64	Dudley,	1903	1,986,847	16	$\frac{1}{5}$	250 00	416 67	2,400 00
	Webster,	1903	8,705,890	23	$\frac{2}{5}$	500 00	-	
65	Belchertown,	1904	933,765	15	$\frac{15}{25}$	540 00	900 00	1,500 00
	Enfield,	1904	725,450	7	$\frac{7}{25}$	210 00	350 00	

¹ Added in 1912.² Added in 1908.³ Added May 16, 1905, by decree of State Board of Education.

Superintendency Unions — Continued.

Superintendent of Schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
Charles L. Clay, North Dana,	Frank P. Hall, Greenwich Village.	Mrs. Nellie M. Brown, Dana.
Osmon C. Evans, 115 Lincoln Street, Worcester.	William T. Duvall, Auburn, Box 8.	Marius W. Hovey (Manchaug), Sutton.
Harvey R. Williams, Wenham,	Frank E. Buckley, Essex, Box 44.	Mrs. Adeline P. Cole, South Hamilton.
Chester W. Humphrey, Rochester.	Charles C. Perkins, Carver, .	Ellis G. Cornish, Carver.
Melvin J. West, Millis, . . .	John C. Mulvehill, Westwood,	Osgood T. Dean, Millis.
Alfred O. Tower, Sheffield, .	E. L. Boardman, Sheffield, .	Z. H. Cande, Sheffield, R. F. D. No. 1.
Elbridge W. Goodhue, Haydenville.	Thomas K. Utley, Chesterfield.	William H. Baker, Chesterfield.
Theodore W. King, West Stockbridge.	George A. Germann, Alford, .	Frederick C. Tobey, West Stockbridge.
Mortimer H. Bowman, Dighton.	J. S. Place, Dighton, . . .	Joseph K. Milliken, North Dighton.
Charles C. Richardson, Leicester.	Aloysius B. Kennedy (Rochdale), Leicester.	M. Daniel Woodbury, Charlton.
Francis S. Brick, Maynard, .	James F. Parker (Gleasondale), Stow.	James J. Hilferty, Maynard.
Chester D. Stiles, South Deerfield.	George F. Howland, Conway,	Edward A. Rice, South Deerfield.
Walter E. Gushee, Ludlow, .	Albert A. Gove, Ludlow, .	Percival V. Hastings, Agawam.
Josiah S. McCann, Granville,	Leon H. Bearse, West Granville.	Mrs. Emma L. Stow, Granville Center.
Ernest W. Robinson, Webster,	Spaulding Bartlett, Webster, .	J. Joseph Gilles, Dudley, R. F. D., No. 1.
Alvan R. Lewis, Belchertown,	Mrs. M. Rosilla Barlow, Enfield.	R. E. Fairchild, Belchertown.

Superintendency Unions — Concluded.

Number.	UNIONS.	When formed.	Valuation of assessed estate April 1, 1912.	Number of schools, 1912-13.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
66	Merrimac, ¹ . . .	1912	\$1,339,714	10	$\frac{7}{100}$	\$262 50	\$437 50	\$1,700 00
	Newbury, . . .	1905	1,567,648	7	$\frac{7}{100}$	150 00	250 00	
	Salisbury, . . .	1905	1,339,970	9	$\frac{7}{100}$	150 00	250 00	
	West Newbury, . . .	1905	1,057,611	7	$\frac{7}{100}$	187 50	312 50	
67 ²	Ashburnham, . . .	1905	1,220,425	11	$\frac{1}{2}$	250 00	416 67	2,000 00
	Winchendon, . . .	1905	4,209,430	29	$\frac{3}{8}$	500 00	—	
68	Bolton, . . .	1909	647,445	5	$\frac{2}{10}$	150 00	250 00	1,900 00
	Dunstable, ³ . . .	1911	425,896	3	$\frac{1}{10}$	75 00	125 00	
	Harvard, . . .	1909	1,701,334	4	$\frac{2}{10}$	150 00	250 00	
	Pepperell, . . .	1909	2,268,618	14	$\frac{3}{10}$	375 00	625 00	
69 ⁴	Ayer, . . .	1909	2,301,131	11	$\frac{4}{10}$	300 00	500 00	2,000 00
	Boylston, . . .	1909	518,500	4	$\frac{1}{10}$	75 00	125 00	
	Shirley, . . .	1909	1,254,941	7	$\frac{2}{10}$	150 00	250 00	
	West Boylston, . . .	1909	946,489	8	$\frac{3}{10}$	225 00	375 00	
70	Somerset, . . .	1909	1,582,130	13	$\frac{1}{2}$	375 00	625 00	1,800 00
	Swansea, . . .	1909	1,655,270	13	$\frac{1}{2}$	375 00	625 00	
71	Billerica, . . .	1909	2,829,996	13	$\frac{3}{8}$	300 00	500 00	2,200 00
	Stoneham, . . .	1909	5,260,880	27	$\frac{5}{8}$	450 00	—	
72	Freetown, . . .	1911	994,640	10	$\frac{3}{8}$	300 00	500 00	1,800 00
	Westport, . . .	1911	2,208,150	18	$\frac{5}{8}$	450 00	750 00	
73	Foxborough, . . .	1911	2,582,600	16	$\frac{5}{10}$	375 00	625 00	1,650 00
	Norton, . . .	1911	1,504,350	10	$\frac{4}{10}$	225 00	375 00	
	Plainville, . . .	1911	858,554	6	$\frac{3}{10}$	150 00	250 00	
74	Franklin, . . .	1911	4,433,500	27	$\frac{7}{10}$	525 00	—	1,800 00
	Wrentham, . . .	1911	1,401,196	8	$\frac{3}{10}$	225 00	375 00	
75	Clarksburg, . . .	1912	283,299	7	$\frac{3}{10}$	225 00	375 00	1,500 00
	Florida, . . .	1912	207,490	5	$\frac{2}{10}$	150 00	250 00	
	Monroe, . . .	1912	173,269	4	$\frac{2}{10}$	150 00	250 00	
	Savoy, . . .	1912	183,890	7	$\frac{3}{10}$	225 00	375 00	
76	Blackstone, . . .	1913	2,370,725	26	$\frac{3}{8}$	500 00	833 33	1,800 00
	Seekonk, . . .	1913	1,589,435	14	$\frac{1}{2}$	250 00	416 67	

¹ Added in 1912.² Union No. 67 formed May 16, 1905, by decree of State Board of Education.³ Added in 1911.⁴ Union No. 69 formed Sept. 20, 1909, by decree of State Board of Education.

NOTE. — Of the foregoing unions, those numbered 24, 28, 40 and 53 were authorized by special acts of the Legislature.

The financial years of all the unions date from July 1, with the exception of those numbered 56, 69 and 73 which date from September 1, October 15 and August 1, respectively.

Superintendency Unions — Concluded.

Superintendent of Schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
Alberto W. Small, 110 State Street, Newburyport.	Arthur P. Brown, Salisbury, .	Walter L. Chaloner, Merrimac.
Edwin S. Cobb, Winchendon,	Rev. Alfred Free, Winchendon,	Hobart E. Warren, Ashburnham, Box 243.
Austin R. Paull, Pepperell, .	Rev. Lorenzo D. Cochrane, Bolton.	Mary L. P. Shattuck, Pepperell, Box 31.
Frank C. Johnson, Ayer, .	Albert W. Hinds, West Boylston.	George H. Brown, Ayer.
Frederick F. Williams, 199 North Main Street, Fall River.	Guy V. H. Slade, (Pottersville), Somerset.	Dr. J. Wesley Bowker, Somerset.
Arthur B. Webber, Stoneham,	Maurice A. Buck, Billerica, .	Walter Gorham, 46 Spring Street, Stoneham.
William H. Millington, 447 Prospect Street, Fall River.	Rev. John W. Reynolds (Assonet), Freetown.	Charles F. Sanford, Westport.
Ira A. Jenkins, Foxborough, .	Rufus King, Plainville, .	John E. Warren, Mansfield, R. D.
J. H. Carfrey, Franklin, .	Elbridge J. Whitaker, Wrentham.	Matthew F. Conroy, Franklin.
Arthur C. Harrington, North Adams, Box 83.	George N. Thatcher (Drury) Florida.	Mrs. Charles W. Ramage, Monroe Bridge.
Albert G. Eldridge, Blackstone.	Wm. F. Fitzgerald, Blackstone.	Harry W. Brown, Attleborough, R. F. D. No. 4.

X. TEACHERS' CONFERENCES.

Conferences for Elementary School Teachers.

A number of conferences were held during the year for the purpose of aiding superintendents of schools and elementary school teachers in their work. Three fourths of the time at each conference was devoted to a free discussion of methods of instruction in the usual school subjects, and the remaining time to the practical arts.

A memorandum outlining the aims of the conferences and the topics to be discussed was distributed several days before the time of each meeting to teachers and superintendents of schools who were invited to attend, with a request that they come prepared to give a statement of their experience.

These conferences were in charge of Julius E. Warren as agent of the Board. Valuable assistance was given by Miss Hannah P. Waterman, Miss Matilda B. Doland, Miss Nellie B. Allen, William E. Riley, and by the Field-agent of the Free Public Library Commission, Miss Zaidee Brown.

A list of the conferences follows:—

DATE.	Where held.	Number present.	Towns represented.
April 2, . . .	Sturbridge,	33	Holland, Wales, Enfield.
April 3, . . .	Charlton,	45	Charlton, Grafton.
April 4, . . .	Sutton,	29	Grafton, Millbury, Sutton.
April 7, . . .	North Adams, ¹	300	Most towns in Berkshire County represented.
April 8, . . .	Lanesborough,	46	Lanesborough, Hancock, Clarksburg, Peru, Hinsdale.
April 9, . . .	West Stockbridge,	26	West Stockbridge, Richmond, Egremont, Alford.
April 10, . . .	Otis,	43	Otis.
April 11, . . .	Tyringham,	63	Tyringham, Monterey.
April 14, . . .	Winchendon,	93	Winchendon, Ashburnham, Templeton, Royalston, Hubbardston.
April 15, . . .	Charlemont,	56	Charlemont, Heath, Monroe, Florida, Hawley.
April 16, . . .	Colrain,	45	Colrain, Buckland, Shelburne.
April 17, . . .	Ashfield,	47	Ashfield, Cummington, Goshen, Plainfield.
April 21, . . .	West Brookfield,	56	West Brookfield, Warren, New Braintree.
April 22, . . .	Belchertown,	40	Belchertown, Enfield.
April 23, . . .	Leverett,	23	Leverett, Shutesbury, New Salem.
April 24, . . .	Erving,	43	Erving, New Salem, Wendell.
April 28, . . .	Russell,	39	Huntington, Montgomery, Blandford, Russell.
April 29, . . .	Southwick,	37	Tolland, Southwick, Granville.
May 23, . . .	Harwich,	45	Hyannis, Harwich, Orleans.
Oct. 17, 18, . .	Oak Bluffs,	39	Chilmark, Edgartown, Oak Bluffs, Tisbury, West Tisbury.
Nov. 7, . . .	Lanesborough,	26	Cheshire, Clarksburg, Hancock, New Ashford, Lanesborough.
Totals, 21 conferences, .		1,127	

¹ A conference of school committees was held in connection with this meeting.

Conferences on Programs of Small High Schools.

In the fall of 1912 and during the early part of 1913, fifteen conferences were held at each of which were gathered superintendents and teachers from high schools in the vicinity.

The basis for discussion at these conferences was a "Memorandum for Conference on the Program of Small High Schools," prepared by the Board of Education. This memorandum dealt with the program as a whole, with the selection of the work for each year, and also with methods to be employed in each subject.

The conferences were conducted by Deputy Commissioner Orr and C. D. Kingsley, agent in charge of the work of the small high schools.

At the outset of each conference, a brief statement was made of the purpose of the Board in calling superintendents and high school teachers together, and the main topics for discussion were indicated, with a request for a full and frank discussion. Opportunity was then given for each of those in attendance to present his own point of view upon the questions at issue. There was, at almost every conference, sufficient division of opinion to show a thoughtful attitude regarding the field and responsibility of the high school.

Teachers versed in methods in particular subjects were asked to discuss the results secured in their class work, expressed in terms of the effect of the subject upon the pupil, either in the change in attitude of the boy or girl, or in increased capacity and ability.

The relation of the small high school to the college was also considered. This topic naturally suggested entrance requirements. There was agreement that the present requirements handicap the small high school in doing effective work, and the representatives of the Board were urged to take steps to secure more freedom for the high school.

There is given below a list of the conferences held (the first seven of which were also entered in the seventy-sixth annual report), with the number in attendance and the number of towns represented.

DATE.	Place.	Number of towns represented.	Number in attendance.
1912.			
Oct. 4,	Pittsfield,	12	70
Oct. 14,	Newburyport,	12	50
Oct. 18,	Ayer,	11	52
Oct. 30,	Vineyard Haven,	4	50
Nov. 15,	Hyannis,	7	55
Nov. 22,	Fitchburg,	9	70
Dec. 9,	Northampton,	10	60
1913.			
Jan. 10,	Palmer,	15	82
Jan. 13,	Greenfield,	11	55
Jan. 17,	Worcester,	18	82
Jan. 24,	Framingham,	21	95
Jan. 31,	Mansfield,	16	100
Feb. 7,	Braintree,	17	100
Feb. 21,	Middleborough,	15	60
March 14,	Salem,	11	50
	Totals,	189	1,031

Commercial Teachers' Institute.

A conference for instructors in commercial studies was held, under the auspices of the State Normal School at Salem, for five days, Aug. 25 to 29, 1913. One hundred and fifty different persons were in attendance, a very large proportion of whom were teachers of commercial studies in high schools. The average attendance at the morning sessions was from 40 to 65. At the morning sessions, papers on various phases of commercial education were presented and discussed. The afternoons were devoted to excursions to places of interest in and about Salem. On each of the first four evenings of the institute, a lecture was given.

The quality of the papers presented was such as to justify their publication in a volume of proceedings. They were, with few exceptions, definite, practical and constructive. Their value to the teachers present was shown by the interest in the discussions.

In the opinion of those in attendance, an institute of this nature should be held two years hence.

Ninety-five teachers were present, representing 68 different cities and towns, 19 of which were towns and cities outside Massachusetts.

Conference of Instructors and Supervisors of Vocational Education.

A five days' conference of teachers, directors and officials connected with vocational schools was held at Hyannis, Mass., during the first week of July, 1913. About 150 persons were in attendance.

The conference was in charge of Charles R. Allen, and was organized in the following departments, each under a committee, the name of whose chairman is given below: —

Trade training for girls, Miss Helen R. Hildreth, chairman; homemaking, Mrs. Eva W. White, chairman; electrical trades, Henry C. Fellman, chairman; metal trades, E. H. Fish, chairman; wood trades, Egbert E. MacNary, chairman; general subjects, W. A. O'Leary, chairman.

The program consisted of general meetings, section meetings, and round table discussions at which concrete problems were discussed.

So much benefit was gained from this conference — the first of its kind — that a permanent organization has been formed to insure the annual holding of such a gathering.

XI. KINDERGARTENS.

Number, location and cost of maintenance of public kindergartens for the school year ending July 1, 1913.

CITIES AND TOWNS.	Number of public kindergartens.	Number of teachers.	Number of different pupils.	Minimum age at which pupils are admitted.	Cost.
				Yrs. Mos.	
Attleborough,	1	2	38	4 -	\$847 14
Boston,	124	229	7,484	4 -	182,389 47
Braintree,	5	5	101	4 8	2,618 36
Bridgewater,	1	1	41	4 -	1,500 00
Brookline,	11	21	464	3 6	19,413 40
Cambridge,	16	28	1,006	4 -	19,993 26
Chicopee,	2	2	76	3 6	1,070 00
Easton,	1	2	60	4 6	106 97
Fall River,	6	12	381	4 -	6,928 82
Falmouth,	1	1	22	4 6	540 00
Fitchburg,	4	4	143	5 -	2,100 00
Greenfield,	2	6	62	4 6	1,000 00
Haverhill,	4	6	232	4 -	3,850 00
Holyoke,	10	20	534	4 -	12,072 17
Hopedale,	1	2	25	4 -	800 00
Lee,	1	1	24	3 6	635 99
Lowell,	13	23	689	3 6	12,839 14
Marblehead,	2	4	105	4 -	1,425 00
Milton,	3	5	114	5 -	4,000 00
Newton,	13	29	788	4 -	17,319 11
North Adams,	5	10	261	4 6	4,000 00
Northampton,	2	2	87	4 -	528 00
Pittsfield,	4	8	148	4 -	4,843 62
Salem,	6	2	315	4 -	4,562 64
Somerville,	4	8	299	5 -	4,351 58
Springfield,	17	38	1,786	4 -	25,180 21
Walpole,	1	3	50	3 6	521 22
Waltham,	6	10	274	4 6	5,009 38
Westfield,	4	4	180	4 6	2,000 00
West Springfield,	4	2	143	4 6	625 00
Winchester,	2	2	89	4 5	1,600 00
Worcester,	32	44	1,987	5 -	36,586 30
Totals (32),	308	536	17,978	3½ to 5 yrs.	\$381,256 78

XII. VACATION SCHOOLS, 1912.

CITIES AND TOWNS.	Number of schools.	Number of teachers.	Number of pupils.	Average length of schooling.		Total expenditure for support of schools.
				Mos.	Days.	
Amherst,	1	1	37	1	4	\$70 00
Athol,	1	6	76	—	15	90 00
Attleborough,	2	6	254	1	10	370 93
Boston,	1	10	245	1	10	1,817 40
Brookton,	4	10	268	1	10	612 00
Brookline,	3	10	478	1	10	1,317 60
Cambridge,	5	26	1,123	1	5	1,868 47
Danvers,	1	3	60	1	10	193 00
Fall River,	4	25	655	1	—	1,022 04
Manchester,	1	1	30	1	5	88 00
Medford,	2	12	315	1	10	808 56
New Bedford,	3	6	147	1	10	662 50
Newton,	2	21	797	1	—	1,200 63
Northbridge,	4	4	47	1	15	206 00
Plymouth,	1	3	73	1	10	222 00
Rockland,	1	5	150	1	10	302 81
Saugus,	1	1	46	—	18	41 40
Springfield,	4	2	179	1	10	375 50
Waltham,	3	12	494	1	10	899 86
Worcester,	1	9	253	1	10	962 00
Totals (20),	45	173	5,727	1	7	\$13,130 70

XIII. STATE-AIDED VOCATIONAL EDUCATION.

The State-aided vocational schools of Massachusetts are classified as full-time, part-time, continuation and evening schools. The following table shows the status of these schools in courses conducted and number of students for the school year 1912-13:—

TABLE No. 1.

	Number of students.	Number of students in all schools.
Full-time: —		
Male,	1,663	} 2,792
Female,	1,129	
Part-time: —		
Male,	35	} 35
Female,	—	
Continuation: —		
Male,	—	} —
Female,	—	
Evening: —		
Male,	2,985	} 7,237
Female,	4,252	
Totals,	10,064	10,064

Forty State-aided vocational schools, classified as administrative units without regard to number of activities, are in operation in 33 cities and towns of the Commonwealth. On this same basis of classification there were reported in the seventy-sixth annual report of the Board of Education 28 schools in 24 cities and towns.

TABLE No. 2. — *Schools established during school year 1912-13.*

NAME OF SCHOOL.	Date of opening.
Ashfield Vocational Agricultural Department,	Aug., 1913
Boston Continuation School of Homemaking,	Jan., 1913
Boston Day Industrial School for Boys,	Feb., 1912
Brimfield Vocational Agricultural School,	Sept., 1913
Bristol County Agricultural School,	Sept., 1913
Cambridge Girls' Trade School,	Feb., 1913
Concord Vocational Agricultural Department,	Sept., 1913
Essex County Agricultural School,	Oct., 1913
Hadley Vocational Agricultural Department,	Jan., 1912
Harwich Vocational Agricultural Department,	April, 1912
Methuen Evening Industrial School,	Oct., 1912
Northborough Vocational Agricultural Department,	Feb., 1912
North Easton Vocational Agricultural Department,	Aug., 1912
Quincy Day Industrial School,	Sept., 1912
Sutton Vocational Agricultural Department,	Aug., 1913
Wakefield Evening Industrial School,	Oct., 1912

TABLE NO. 3. — *Schools established previous to school year 1912-13.*

NAME OF SCHOOL.	Date of opening.
Beverly Industrial School,	Aug., 1909
Boston Evening Industrial School,	Oct., 1908
Boston Trade School for Girls,	Sept., 1909
Cambridge Evening Industrial School,	Oct., 1907
Chicopee Evening Industrial School,	Oct., 1908
Everett Evening Industrial School,	Oct., 1911
Holyoke Evening Industrial School,	Oct., 1911
Lawrence Evening Industrial School,	Mar., 1908
Lowell Industrial School,	Sept., 1911
Natick Evening Industrial School,	Oct., 1908
New Bedford Industrial School,	Nov., 1907
Newton Vocational School,	Feb., 1909
Smith's Agricultural School and Northampton School of Industries,	Oct., 1908
North Attleborough Evening Industrial School,	Oct., 1910
Petersham Vocational Agricultural Department,	Sept., 1911
Quincy Evening Industrial School,	Oct., 1911
Somerville Vocational School for Boys,	Sept., 1910
Somerville Vocational School for Girls,	Oct., 1911
Springfield Vocational School,	Sept., 1911
Taunton Evening Industrial School,	Jan., 1908
Watertown Evening Industrial School,	Oct., 1911
Westfield Industrial School,	Sept., 1911
Worcester Boys' Trade School,	Feb., 1910
Worcester Girls' Trade School,	Sept., 1911

TABLE NO. 4. — *Schools which have been discontinued.*

NAME OF SCHOOL.	Opened.	Discontinued.
Beverly Evening Industrial School,	1907	1909
Brookton Evening Industrial School,	1908	1911
Lawrence Day Industrial School,	1909	1913
Pittsfield Evening Industrial School,	1908	1910
Walpole Evening Industrial School,	1909	1910
Waltham Evening Industrial School,	1907	1909

Under chapter 106 of the Acts of 1912, courses in practical arts have been conducted in the following places and centers. Most of the schools were opened during the current year.

TABLE No. 5.

Boston.	Methuen.	Somerville.
Cambridge.	Natick.	Taunton.
Everett.	New Bedford.	Wakefield.
Holyoke.	Newton.	Watertown.
Lawrence.	North Attleborough.	Worcester.
Lowell.	Quincy.	

New schools and courses are under consideration in the following places: —

TABLE No. 6.

Fall River.
Holyoke.

Comparative detailed statistics relating to the work of the vocational schools which the State aids are summarized in the following tables: —

TABLE No. 7. — *Statistics of attendance in the State-aided vocational schools.*

	1911-12.	1912-13.
Number of teachers employed,	233	497
Number of nonresident pupils,	365	508
Total number of pupils, resident and nonresident,	7,164	10,064

TABLE No. 8. — *Financial statement of the State-aided vocational schools, Dec. 1, 1912, to Nov. 30, 1913, inclusive.¹*

Total expenditures for construction,	\$198,212 09
Total expenditures for equipment,	41,304 76
Total expenditures for maintenance,	397,348 62
Total expenditures for the year,	\$636,865 47

Itemized expenditures for maintenance: —

(1) Administration: —

Supervision,	\$47,233 02
Other items,	54,527 95
Total,	\$101,760 97

¹ Some of the amounts included in this statement, for schools which opened in the fall of 1912, represent expenses for a period of somewhat over twelve months.

Itemized expenditures for maintenance — *Concluded.*

(2) Instruction: —

Teachers and helpers (regular),	\$228,677 33
Lecturers and demonstrators	
(special),	14 52
Other items,	58,081 79
Total,	<u>\$286,773 64</u>

(3) Repairs and replacements: —

Buildings,	\$2,867 53
Equipment,	5,946 48
Total,	<u>8,814 01</u>
Total expenditures for maintenance,	<u>\$397,348 62</u>

Itemized sources of income expended for maintenance: —

(1) Tuition claims for nonresidents, paid or unpaid,	\$38,448 66
(2) Revenue from work and products,	20,247 49
(3) Gifts, if any,	—
(4) Other items,	84 27
(5) Net amount spent for maintenance which was derived from local taxation,	338,568 20
Total,	<u>\$397,348 62</u>

Total amount paid by communities for the tuition of nonresident pupils, \$35,241 68

Amount due from the State as reimbursement to such communities
(one half of total amount paid by them), \$17,620 84

Amount due from the State as reimbursement to communities for
operating expenses of approved schools (one half amount paid by
them out of funds derived from local taxation), \$169,284 10

Amount to be asked for in a special bill by Smith's Agricultural
School and Northampton School of Industries, which complies
with the requirements of the Board of Education, but which re-
ceives its support mainly from an endowment fund, and hence
cannot be reimbursed directly under the statute (the amount here
given being one half the amount expended for nonagricultural in-
struction), \$5,673 06¹

TABLE NO. 9. — *Summary of amounts due from the State as reimburse-
ment for money expended for vocational education.*

Total for vocational schools apart from those giving instruction in agriculture, per Table No. 8, page 239, above,	\$174,957 16
Total for reimbursements on account of tuition of nonresident pupils, apart from vocational pupils given instruction in agriculture, per Table No. 8, page 239, above,	17,620 84
Total for vocational agricultural schools, per Table No. 5, page 257, below,	8,662 76
Total for vocational agricultural departments in selected high schools, per Table No. 6, page 259, below,	4,469 11
Total for reimbursements on account of tuition of nonresident voca- tional agricultural pupils, per Table No. 4, page 257, below,	1,362 81
Total,	<u>\$207,072 68</u>

¹ This school will also request reimbursement for vocational agricultural education, which
will make the entire amount called for, \$8,582.90.

TABLE NO. 10. — *Classification of State-aided vocational schools for school year 1912-13.*

[The type of school, number of pupils and courses offered are indicated by figures in the proper columns, i.e., the Lowell Industrial School offers in full-time day, part-time and evening classes, trade instruction for boys and girls, evening trade extension courses for men, day and evening home-making courses for girls.]

LOCATION.	TYPE OF SCHOOL.				COURSES OFFERED.										Total boys.	Total girls.	Grand total.	
	Full-time day school.	Full-time co-operative day school.	Part-time.	Continuation.	Evening.	TRADE COURSES.		EVENING TRADE EXTENSION.		HOME-MAKING (GIRLS).		AGRICULTURE.						
						Boys.	Girls.	Men.	Women.	Day.	Evening.	SEPARATE SCHOOL.		DEPARTMENT IN HIGH SCHOOL.				
												Boys.	Girls.	Boys.				Girls.
Ashfield,	18	-	-	-	-	-	-	-	-	-	-	18	-	18	-	18		
Beverly,	-	60	-	-	-	60	-	-	-	-	-	-	-	60	-	60		
Boston Practical Arts courses, .	-	-	-	-	1,095	-	-	-	-	1,095	-	-	-	-	1,095	-	1,095	
Boston Evening Industrial, .	-	-	-	-	629	-	-	609	20	-	-	-	-	609	20	629		
Boston Day Industrial, .	180	-	-	-	-	180	-	-	-	-	-	-	-	180	-	180		
Boston Trade,	398	-	-	-	109	-	398	-	109	-	-	-	-	-	507	507		
Brimfield,	16	-	-	-	-	-	-	-	-	-	-	16	-	16	-	16		
Bristol County (Dighton), .	26	-	-	-	-	-	-	-	-	-	-	26	-	26	-	26		
Cambridge Evening Industrial,	-	-	-	-	630	-	-	210	-	420	-	-	-	210	420	630		
Cambridge Trade,	76	-	-	-	-	-	76	-	-	-	-	-	-	-	76	76		
Chicopee,	-	-	-	-	119	-	-	119	-	-	-	-	-	119	-	119		
Concord,	23	-	-	-	-	-	-	-	-	-	-	-	23	23	-	23		
Essex County (Danvers), . .	97	-	-	-	-	-	-	-	-	-	-	93	4	93	4	97		
Everett,	-	-	-	-	193	-	-	113	-	80	-	-	-	113	80	193		
Hadley,	7	-	-	-	-	-	-	-	-	-	-	-	7	-	-	7		

Harwich,	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1	13	1	14
Holyoke,	-	-	-	-	391	-	-	178	-	-	-	-	-	-	-	-	-	178	213	301	
Lawrence,	-	-	-	-	410	-	-	191	-	-	-	-	-	-	-	-	-	191	219	410	
Lowell,	361	-	-	-	560	212	-	219	-	8	149	333	-	-	-	-	-	431	490	921	
Methuen,	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	14	14	
Natick,	-	-	-	-	68	-	-	-	-	-	-	68	-	-	-	-	-	-	68	68	
New Bedford,	173	-	8	-	823	120	15	283	-	-	46	540	-	-	-	-	-	403	601	1,004	
Newton,	352	-	-	-	192	222	-	124	-	-	130	68	-	-	-	-	-	346	198	544	
Northampton,	122	-	-	-	-	25	-	-	-	-	73	-	24	-	-	-	-	49	73	122	
Northborough,	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	1	6	7	
North Attleborough,	-	-	-	-	86	-	-	61	2	-	-	23	-	-	-	-	-	61	25	86	
North Easton,	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	15	
Petersham,	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	10	
Quincy Day Industrial,	-	60	10	-	-	70	-	-	-	-	-	-	-	-	-	-	-	70	-	70	
Quincy Evening Industrial,	-	-	-	-	125	-	-	94	-	-	-	31	-	-	-	-	-	94	31	125	
Somerville (boys),	48	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-	-	48	-	48	
Somerville (girls),	72	-	-	-	105	-	19	-	-	-	53	105	-	-	-	-	-	-	177	177	
Springfield,	71	-	-	-	-	71	-	-	-	-	-	-	-	-	-	-	-	71	-	71	
Sutton,	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	1	14	15	
Taunton,	-	-	-	-	67	-	-	31	-	-	-	36	-	-	-	-	-	31	36	67	
Wakefield,	-	-	-	-	48	-	-	-	-	-	-	48	-	-	-	-	-	-	48	48	
Watertown,	-	-	-	-	138	-	-	-	-	-	-	138	-	-	-	-	-	-	138	138	
Westfield,	37	-	-	-	33	37	-	33	-	-	-	-	-	-	-	-	-	70	-	70	
Worcester (boys),	368	3	17	-	720	388	-	720	-	-	-	-	-	-	-	-	-	1,108	-	1,108	
Worcester (girls),	163	-	-	-	682	-	163	-	-	-	-	-	-	-	-	-	-	-	845	845	
Totals,	2,669	123	35	-	7,237	1,433	671	2,985	139	451	4,113	169	4	106	3	4,983	5,331	10,064			

The following table shows the departments in each day school. A department as here used means a course of study including practice, related technical work and general academic training making for efficiency in a definite trade, and also in citizenship.

TABLE NO. 11.

[The departments in each school are indicated by x in the proper columns, i.e., the Newton Vocational School contains departments of machine shop work, electrical work, pattern making, cabinet making, printing and home-making.]

	Machine shop work.	Automobile work.	Sheet metal work. ¹	Coppersmithing. ¹	Steam engineering.	Electrical work.	Telephone construction and maintenance. ¹	Power plant engineering.	Pattern making.	Cabinet making.	Joinery. ¹	House carpentry.	Mold loft work. ¹	Plumbing. ¹	Printing.	Agriculture.	Dressmaking.	Millinery.	Power machine operating.	Cooking and serving. ¹	Home-making.
Ashfield,
Beverly,
Boston Industrial,
Boston Trade,
Brimfield,
Bristol County,
Cambridge,
Concord,
Essex County,

[illegible]¹ New trades added during year 1912-13.

During the school year 1912-13, 122 courses in 37 different subjects were given in State-aided evening vocational schools, as follows: —

Building trades: drawing and plan reading, 10; drawing for sheet metal workers, 5; drawing for structural steel workers, 1; interior decorating, 1; plumbing, 2; roof framing, 4; stair building, 4.

Electrical trades: drawing for electricians, 1; wiring, motor and power work, 8.

Engineers, janitors and firemen: boiler firing, 1; gasoline engine practice, 2; steam engineering, 1.

Granite workers: monument design and lettering, 1.

Jewelry workers: design and modeling, 2; engraving and coloring, 1.

Machine trades: automobile construction, 2; automobile repairing, 2; drawing, 17; forging, 3; shop mathematics, 4; shop practice, 11; tool making, 3; tool design, 1; gear design, 1.

Paper makers: chemistry, 1.

Printers: composition, 2.

Shipfitters: mold loft work, 1.

Textile trades: loom fixing, 2; ring spinning fixing, 1; weaving, 1; design, 1.

Woodworking trades: cabinet making, 4; pattern making, 3.

Women's trades: cooking, 1; dressmaking, 3; millinery, 1; power machine operating, 2.

Household arts for women was given in 17 cities and towns.

Of these the following are new courses for the year 1912-13: chemistry for paper makers, ring spinning fixing, mold loft work.

The following figures indicate in part the extent of vocational education in Massachusetts: —

TABLE No. 12.

Number of cities and towns where some form of vocational education is being maintained,	44
Number of pupils attending State-aided vocational schools,	10,064
Number of pupils attending certain institutions not State-aided,	4,498
Total number of pupils,	14,562

Conclusions.

In the tables presented herewith are set forth the vital statistics of the work undertaken in State-aided vocational schools during the year.

Special effort has been put forth to make this work distinctively vocational. Constant vigilance is required to hold to standards which give this result, but we are convinced that the final test of the efficiency of these schools must be the pupils who are their product and the gainful activities into which they are directed.

The spirit of co-operation with which the work is carried on by the directors and teachers engaged is a source of inspiration. A conference of those engaged with and interested in industrial education was held at Hyannis during the first week of July, 1913. A very positive interest was manifested in the sectional meetings and round table discussions as was evidenced by the general expression of a desire to have the event become an annual one.

The attempt to give State-wide opportunity to residents who wish to secure industrial education is receiving substantial support. This is gauged by the increasing number of non-resident pupils and the quite uniform readiness with which the home towns and cities defray the expense entailed. Great care must be exercised in the administration of the responsibilities entailed by this departure. The equity which should be maintained toward the applicant for admission to State-aided schools, the municipality of residence, and the city or town in which the school concerned is located gives frequent opportunity for misunderstandings. This is incident to the operation of new machinery and will be minimized in the future in proportion as equitable settlements are made.

No considerable body of new legislation is required. Some perfecting legislation will be necessary but our activity in the immediate future should be directed toward increasing the efficiency of the schools made possible by the existing statutes.

XIV. STATE-AIDED VOCATIONAL AGRICULTURAL EDUCATION.

Chapter 471 of the Acts of 1911 defines vocational agricultural education as "that form of vocational education which fits for the occupations connected with the tillage of the soil, the care of domestic animals, forestry and other wage-earning or productive work on the farm." It also provides state aid for training of this type, to the amount of one half the "net maintenance" expenses, in the case of approved agricultural schools; and to the amount of two thirds the salaries paid strictly agricultural instructors, in the case of approved agricultural departments maintained in connection with selected high schools. Four approved schools and 8 approved departments are now in operation.

No dormitories are provided. With but now and then an exception, where a pupil from another part of the State has found a boarding place in a family, the pupils live at their own homes. An opportunity to participate in productive farm work throughout the year and to apply classroom instruction to such work is considered to be fundamentally important in agricultural instruction, the aims of which are vocational. In most cases pupils living at home have land and live stock with which to work. In notable instances boarding pupils have been able to secure work on farms with opportunity to apply their agricultural knowledge day by day as gained. A few boarding pupils may, thus, be granted privileges which closely approximate those which other pupils find at their homes. Experience indicates that, as a rule, the best results are to be expected when the pupil lives at home and has home work in which he applies, under the close and continuous supervision of the instructor, the principles taught in the classroom and laboratory. It is, therefore, a cause of encouragement to know that in the new Independent Agricultural School of the county of Essex, even with an initial enrolment of more than 90 pupils from all parts of the county, practically every pupil has found at, or near, his own home an opportunity for productive farm work. In Bristol County only 2 need land at the school. As the number of schools and departments increases, fewer pupils will find it necessary to board, and the

efficiency of this plan of training may be expected to advance proportionately.

The employment of the agricultural pupils must be approved by the Board of Education. A sharp distinction is drawn between ordinary farm labor, and farm work studied by the pupil and supervised by the instructor. Productive enterprises controlled by the pupil and his instructor are called "projects."¹ These projects, when conducted successfully at home, benefit both pupil and parent. Project returns (pupil and parent) were to total earnings from farm work, in the illustrative list of 25 pupils given in the report of 1912, in the ratio of about three to five. This ratio for the 1913 illustrative list of 30 pupils is about five to nine. The parents of most of the pupils attending vocational agricultural courses face a shortage in farm labor and hence require the services of their sons for routine farm work, especially from springtime till harvest. Even when such help is most needed, however, it will probably be possible to maintain a ratio of at least two to five as a desirable standard.

Conditions favorable to maintaining this standard are secured by the requirement that a pupil applying for admission to a vocational agricultural course shall file a statement indorsed by his father, that the obligations for "project study" and "project work" are understood and accepted. The statement is made in the form of a combined application and agreement, and as a matter of record is forwarded by the local school authorities to the Board of Education.

Sixty-nine pupils did supervised project work during the school year ending in 1912. In the school year ending 1913, the number doing project work was 77. A table showing the financial returns and economic significance of this training during the year just closed is given on pages 260 and 261. Thirty pupils — 5 from each of the six centers where agricultural "project work" and "project study" were in operation in 1913 — earned from farm work, in connection with good standing in the classroom, nearly ten thousand dollars (\$9,728.03). The number admitted to such training for the school year ending in 1914 is 266.

¹ See Bulletin No. 8 (1912, No. 4), "Agricultural Project Study."

Supervision of home projects enables the vocational agricultural instructor to study at first hand the farm conditions under which his pupils must work. Each pupil's project, properly planned and successfully executed, is a demonstration of improved methods which has great potential, and frequently much actual value, because of its influence in his neighborhood. Methods tried on a small scale by the pupil, under the supervision of his instructor, have been adopted by the father and put into effect on a large scale. One father who last year permitted his son to spray, for the first time on his farm, six rows of potatoes with Bordeaux mixture as protection against blight, has this year bought a large pump and barrel spraying outfit. A pupil who is this year studying dairying and keeping records of cost and income on the home herd, recently persuaded his father to permit a slight change in the grain ration. Two and one half pounds of gluten feed were substituted for an equal amount of white middlings. This improvement increased the cost 10 cents per week for grain but produced a gain in milk for that week of \$1.10. The boy has now been permitted to improve the ration further by using cottonseed meal. In a larger herd an increase of \$2.20 for feed produced in less than a week an increase in milk to the value of \$4.20. Thus confidence in improved methods of farming is being gradually built up.

The advisory committees of farmers, whom the local school officers are required by chapter 471 to appoint as aids to the maintenance of efficient vocational agricultural training, are proving to be important factors. Special mention should perhaps be made of the action of the advisory committees in Brimfield and Ashfield, in appointing subcommittees on dairy improvement. Cow testing, begun by the dairy pupils at their own homes, is extending to other farms. Close co-operation in this work is maintained between the instructors and the Extension Service of the Massachusetts Agricultural College. In Brimfield a subcommittee on orchard improvement is at work. Co-operative relations have been established between the instructor and the Hampden County Improvement League. The league has assumed responsibility for the treatment of the trees on one farm as a demonstration orchard. Renovation

work is being done by the agricultural pupils under the joint direction of their instructor and of the horticulturist of the league. The advisory committee in Brimfield has further appointed a subcommittee to consider ways and means of furnishing credit to certain pupils who are desirous of undertaking projects on a large scale under the supervision of their instructor during the summer of 1914. Arrangements are now complete and the money paid in for the co-operative purchase of a carload of selected seed potatoes from Maine, delivered in Palmer at a price considerably lower than that at which ordinary potatoes are now selling in the Palmer markets.

Co-operation between agricultural instructors and important agencies seeking to improve farm production and management is encouraged wherever agricultural training is in operation. A significant achievement is the working agreement by which each instructor is becoming the local representative of the Extension Service of the Massachusetts Agricultural College and of the Office of Farm Management of the United States Department of Agriculture, for investigations and advisory work among the farmers in his vicinity. The director of the Extension Service has been appointed by the Office of Farm Management as "State leader." Three instructors have already been appointed "collaborators," and are thereby entitled to the franking privilege for all "investigational and advisory" mail matter. These were test cases. Other appointments will follow. This co-operative agreement will prevent duplication of work and of expenditures of public funds. Each instructor will gather detailed information as to the management of ten farms on forms furnished by the government. A complete survey of all of the farms in the town of Brimfield is to be made. All calculations will be made at Amherst or in Washington, and reports will be returned to the instructors for the benefit of the owners or operators of the farms investigated. These reports will cover such important items as the labor income of the farmer, and the comparative profits from fruit growing, potato growing and dairying. While each instructor will receive but \$1 a year for his services as "collaborator," the information gained will be of great value in wise guidance of the project study and the project work of the agricultural pupils.

Vocational education may be organized as day school work for pupils fourteen to twenty-five years of age, or as part-time work. When the agricultural pupils are in the full-time day school group, their project work occupies about 50 per cent. of their time, including the summer season, and their project study about 30 per cent. The remainder of the time of these pupils is devoted to general education in English, history, civics and science. Pupils in the part-time group, in many cases, are older boys or young men who are farm owners or operators. Their attention is usually devoted exclusively to the study of those phases of agricultural science which apply directly to their particular farm projects. Both part-time and full-time pupils receive the benefits of summer supervision by the agricultural instructor.

Vocational education may also be organized as evening school work. "Evening instruction" for adult farmers is entirely apart from the regular classes for day school or part-time agricultural pupils. Some phases of this instruction can be given to good advantage in the evening in an assembly, or classroom. Most of it, however, can most effectively be given on farms before dark. The amount of time and attention which an agricultural instructor can devote to the assistance of adult farmers depends on the number of day school or part-time pupils in his charge. An instructor with 20 day or part-time pupils can do little, if any, work with adults. When he has only 10, he may do a great deal. The kind and extent of service to farmers is, furthermore, largely dependent upon the age, experience, training and personality of the instructor. The agricultural instructor at Harwich during the past year was able to do much work with adult farmers. His enrolment of boys was not too large, and he had the right type of mind. He made a careful survey of cranberry growing, with particular reference to the bearings of Federal and State research and experiments upon possible increase of production by use of proper fertilizers, and upon control of cranberry diseases by spraying. Growers laid out carefully measured and staked plats, followed his instructions, and on several plots increased their yields from 10 per cent. to 150 per cent. One grower showed his confidence in the instruction by purchasing and using a power sprayer ex-

tensively the past season; and, from this experience, is prepared to profit more fully next year. Six men for the first time seeded fields to alfalfa. The agricultural instructors co-operated in planning and conducting a great number of alfalfa and fertilizer demonstrations on farms in their several localities. Experience shows that adult farmers value the assistance of a capable instructor. Moreover, because they are in absolute control of their land, equipment and operations, and may put into practice at once the new ideas which appeal to their good judgment, adult farmers sometimes profit in greater economic measure from agricultural instruction than can most day school and part-time pupils.

Prizes continue to be important in promoting efficient vocational agricultural education. One instructor has found contests held in connection with the school to be of even greater value than exhibits at fairs, because of the local interest aroused in the work of the school and its several pupils. Another instructor finds that competitions impress certain truths upon the minds of the pupils more effectively than do most other teaching devices. Another states that they inspire the pupils to excel. Other advantages cited are: the possibility of demonstrating, before or after the contests, all kinds of farm equipment; opportunity to handle and judge fine live stock; and the bringing to the attention of boys already familiar with farm work much that is to their advantage of knowledge about live stock, fruit and vegetables. Competitions arouse pupils to the sense that good live stock and good products are indications of superior and successful farming. Good contests appear to quicken the interest of parents and neighbors in scientific agriculture. One instructor thinks that we cannot value too highly competitions which "call for quantity and quality of thinking" on the part of the individual boy, and on the part of a group of boys who are ambitious to return to school as a "winning team." Only one school did not compete during the past season. The boys in the eleven other agricultural schools and departments won prizes to the value of \$715.05. The Hadley boys won \$187. The Petersham boys led with a total of \$194.25. Mr. Gordon Nightingale of Petersham was the highest individual winner with a total of \$165, including the

State championship which he won at Brockton in judging live stock.

Under the supervision of the Board of Education, but without financial reimbursement, an interesting experiment to cover a period of at least three years has this year been started. Mr. Nathan D. Bill of Springfield has assumed responsibility for maintaining an agricultural instructor to render service in the hill towns of Worthington, Chesterfield and vicinity, where there are no high schools, like that rendered by the vocational agricultural instructors. The instructor was selected from the Board's list of men who appear to have special qualifications for such work. An advisory committee of representative farmers has been appointed by the school committees of these towns. The instructor has the hearty co-operation of both the advisory committee and the superintendent of schools. When the schools are in session, the agricultural instructor goes from school to school, much as does the supervisor of music, teaching lessons bearing upon the farm work which is to be done at the homes of the pupils and leaving with the regular teachers follow-up questions, information and suggestions. The instructor takes his vacation in midwinter, and during his months on duty divides his work between the schools and the farms. Cow testing, orchard renovation, soil and crop improvement, and canning club plans are now under way. Both because of the rare public spirit shown by Mr. Bill, and because there are not a few other localities in Massachusetts which might profit greatly from successful service of this sort, the progress of this experiment and its results merit close attention.

Eight tables are herewith submitted. These contain data on State-aided vocational agricultural education for the fiscal year ended Nov. 30, 1913, as follows: (1) list of schools and their directors; (2) list of departments in selected high schools and their agricultural instructors; (3) distribution of benefits, shown by the list of towns and cities with pupils attending schools and departments named in tables No. 1 and No. 2, and by the number of pupils from each city or town; (4) reimbursement due the several cities and towns on account of tuition of nonresident pupils admitted to the schools and departments listed in tables No. 1 and No. 2; (5) reimbursement due on

account of maintenance of the schools listed in Table No. 1; (6) reimbursement due towns on account of salaries paid the special agricultural instructors employed in the departments, listed in Table No. 2; (7) summary of amounts of reimbursement due; and (8) examples of the income of vocational agricultural pupils from farm work.

In conclusion it may not be amiss to call special attention to tables No. 3 and No. 8. It is evident that the establishment of new schools and departments, together with the provision for admission of nonresident pupils, is resulting in a rapidly widening distribution of the benefits of State-aided vocational agricultural education. It is evident, also, that the training offered is appreciated by both pupils and parents. Two hundred and sixty-six pupils, from 80 towns and cities, are enrolled for the school year ending 1914. The educational returns are no less striking than are the economic.

TABLE No. 1. — *List of State-aided vocational agricultural schools.*

SCHOOL.	Location.	Established in fiscal year ended Nov. 30.	Director.
Smith's Agricultural School and Northampton School of Industries.	Northampton, .	1908	Dr. H. N. Loomis.
Independent Agricultural School of Bristol County.	Segreganset (town of Dighton).	1913	G. H. Gilbert.
Brimfield Vocational Agricultural School.	Brimfield, . . .	1913	G. H. Kenney.
Independent Agricultural School of the county of Essex.	Hathorne (town of Danvers).	1913	F. A. Smith.

TABLE No. 2. — *List of State-aided vocational agricultural departments in selected high schools.*

NAME OF HIGH SCHOOL.	Location.	Agricultural department established in fiscal year ended Nov. 30.	Agricultural instructor.
Agricultural High School, . . .	Petersham,	1911	H. E. Botsford.
Hopkins Academy,	Hadley,	1912	E. J. Burke.
High school,	Harwich,	1912	M. S. Rose.
Oliver Ames High School, . .	North Easton, . . .	1912	J. G. Powers.
Sanderson Academy,	Ashfield,	1913	Rudolf Sussman.
High school,	Sutton,	1913	O. G. Anderson.
High school,	Concord,	1913	A. W. Doolittle.
High school,	Marlborough, ¹ . . .	1913	W. H. Bronson.

¹ The instruction at Marlborough is in part new, but in part a continuance, at a more convenient transportation center, of instruction begun in February, 1912, at Northborough.

TABLE NO. 3. — *Distribution of benefits of State-aided vocational agricultural education, as shown by towns and cities with pupils attending schools or departments.*

HOME TOWN OR CITY.	Number attending.	Location of school or department attended.
Chester,	1	Northampton.
Holbrook,	1	"
Holyoke,	1	"
Montgomery,	1	"
New Marlborough,	1	"
Northampton,	9	"
Plainfield,	2	"
Warwick,	1	"
Westhampton,	4	"
Whately,	1	"
Williamsburg,	1	"
Worthington,	1	"
Amesbury,	4	Essex County.
Beverly,	6	"
Boxford,	4	"
Danvers,	7	"
Essex,	1	"
Georgetown,	3	"
Gloucester,	3	"
Haverhill,	2	"
Ipswich,	2	"
Lawrence,	5	"
Lynn,	7	"
Lynnfield,	3	"
Manchester,	1	"
Marblehead,	3	"
Methuen,	4	"
Middleton,	6	"
Nahant,	3	"
Newburyport,	1	"
North Andover,	1	"
Peabody,	7	"
Rowley,	1	"
Salem,	12	"

TABLE NO. 3. — *Distribution of benefits* — Continued.

HOME TOWN OR CITY.	Number attending.	Location of school or department attended.
Salisbury,	1	Essex County.
Saugus,	2	"
Topsfield,	2	"
Wenham,	1	"
Dighton,	5	Bristol County.
Fall River,	1	"
Hyde Park,	3	"
New Bedford,	1	"
North Middleborough,	1	"
Raynham,	1	"
Rehoboth,	1	"
Taunton,	9	"
Westport,	3	"
Brimfield,	12	Brimfield.
Holland,	1	"
Sturbridge,	1	"
Warren,	2	"
Dana,	1	Petersham.
Gardner,	1	"
New Salem,	1	"
Petersham,	7	"
Amherst,	2	Hadley.
Hadley,	4	"
Somerville,	1	"
Berlin,	1	Northborough.
Northborough,	2	"
Shrewsbury,	1	"
Southborough,	1	"
Westborough,	1	"
Worcester,	1	"
Chatham,	1	Harwich.
Harwich,	8	"
Orleans,	4	"
Truro,	1	"
Easton,	15	Easton.
Ashfield,	10	Ashfield.

TABLE NO. 3. — *Distribution of benefits* — Concluded.

HOME TOWN OR CITY.	Number attending.	Location of school or department attended.
Buckland,	2	Ashfield.
Cummington,	1	"
Hawley,	1	"
Plainfield,	4	"
Sutton,	15	Sutton.
Bedford,	2	Concord.
Concord,	13	"
Lincoln,	2	"
South Acton,	2	"
West Acton,	4	"
Totals (80),	266	12

TABLE NO. 4. — *Tuition reimbursement statement of State-aided vocational agricultural schools and departments in selected high schools to and including Nov. 30, 1913.*

TOWN OR CITY.	Number of pupils.	Tuition paid.	School or department attended.	Reimbursement due. ¹
Chester,	1	\$172 22	Northampton, . .	\$36 11
Goshen,	1	44 44	" . .	22 22
Holyoke,	1	33 33	" . .	16 66
Medway,	1	72 22	" . .	36 11
Montgomery,	1	100 00	" . .	50 00
Natick,	1	72 22	" . .	36 11
Plainfield,	2	200 00	" . .	100 00
South Hadley,	1	100 00	" . .	50 00
Springfield,	1	44 44	" . .	22 22
Warwick,	1	100 00	" . .	50 00
Williamsburg,	1	100 00	" . .	50 00
Worthington,	1	100 00	" . .	50 00

¹ Chapter 471 of the Acts of 1911 provides that towns which have paid tuition on account of nonresident pupils admitted to vocational agricultural schools and departments in selected high schools with the approval of the Board of Education shall be reimbursed one half the amount they have paid.

TABLE NO. 4. — *Tuition reimbursement statement* — Concluded.

TOWN OR CITY.	Number of pupils.	Tuition paid.	School or department attended.	Reimbursement due.
North Middleborough, . . .	1	\$23 71	Bristol County, . . .	\$11 85
Holland,	1	32 50	Brimfield,	16 25
Sturbridge,	1	32 50	"	16 25
Warren,	2	65 00	"	32 50
Dana,	1	100 00	Petersham,	50 00
Gardner,	1	45 00	"	22 50
New Salem,	1	100 00	"	50 00
Amherst,	2	60 00	Hadley,	30 00
Berlin,	1	5 00	Northborough,	2 50
Shrewsbury,	1	70 00	"	35 00
Southborough,	1	72 50	"	36 25
Westborough,	1	20 00	"	10 00
Worcester,	1	112 56	"	56 28
Chatham,	1	90 00	Harwich,	45 00
Orleans,	4	190 00	"	95 00
Truro,	1	100 00	"	50 00
Buckland,	2	52 00	Ashfield,	26 00
Cummington,	1	26 00	"	13 00
Hawley,	1	26 00	"	13 00
Plainfield,	4	104 00	"	52 00
Bedford,	2	65 00	Concord,	32 50
Acton,	6	195 00	"	97 50
Totals (37),	50	\$2,725 64	9	\$1,362 81

TABLE NO. 5. — "*Net maintenance*" reimbursement and general financial statement of the State-aided vocational agricultural schools listed in table No. 1, to and including Nov. 30, 1913.

Total expenditures for construction,	\$77,839 85
Total expenditures for equipment,	11,396 54
Total expenditures for maintenance,	19,403 33
Total expenditures for the year,	<u>\$108,639 72</u>

Itemized expenditures for maintenance: —

(1) Administration: —

Supervision,	\$2,633 34	
Other items,	7,616 39	
Total,	<u> </u>	\$10,249 73

(2) Instruction: —

Teachers and helpers (regular), . .	\$6,897 43	
Lecturers and demonstrators		
(special),	25 00	
Other items,	2,086 91	
Total,	<u> </u>	9,009 34

(3) Repairs and replacements: —

Buildings,	\$33 81	
Equipment,	110 45	
Total,	<u> </u>	144 26
Total expenditures for maintenance,	<u> </u>	\$19,403 33

Itemized sources of income expended for maintenance: —

(1) Tuition claims for nonresidents, paid or unpaid,	\$730 00
(2) Revenue from work and products,	2,265 78
(3) Gifts, if any,	4,855 06
(4) Other items,	46 83
(5) Net amount spent for maintenance which was derived from local taxation,	11,505 66
Total,	<u> </u> \$19,403 33

Amount due from the State as reimbursement to communities for operating expenses of approved schools (one half net amount paid by them out of funds derived from local taxation), \$5,752 83

Amount to be asked for in a special bill by Smith's Agricultural School and Northampton School of Industries which complies with the requirements of the Board of Education but which receives its support mainly from an endowment fund, and hence cannot be reimbursed directly under the statute (the amount here given being one half the net amount expended for agricultural instruction),¹ . . . \$2,909 93

Total reimbursement due, \$8,662 76

¹ This school will request reimbursement for other phases of approved vocational education, the entire amount being \$8,582.99. The balance of the reimbursement to be claimed is included in the amount elsewhere reported as due on account of approved vocational education apart from agriculture.

TABLE No. 6. — *Salary reimbursement statement of State-aided vocational agricultural departments in selected high schools to and including Nov. 30, 1913.*

TOWN.	Period began.	Salary (two thirds of, paid or payable to the agricultural instructor).	Tuition (one half of, received or receivable for nonresident pupils).	Reimburse- ment due. ¹
Petersham,	Dec. 1, 1912	\$821 48	\$122 50	\$698 98
Hadley,	Nov. 30, 1913	666 67	40 00	626 67
Northborough,	Mar. 3, 1913	1,050 00	130 00	930 00
Harwich,	Dec. 1, 1912	866 63	190 20	676 63
Easton,	Feb. 24, 1913	1,000 00	-	1,000 00
Ashfield,	Aug. 18, 1913	233 33	104 00	129 33
Sutton,	Aug. 12, 1913	240 00	-	240 00
Concord,	Sept. 2, 1913	330 00	162 50	167 50
Totals,	-	\$5,218 11	\$749 00	\$4,469 11

¹ Chapter 471 of the acts of 1911 provides for reimbursement only to the amount of two thirds the salary of the agricultural instructor. One half the tuition coming as it does from the State, though indirectly, has therefore been deducted from two thirds the salary in fixing the amount due each town.

TABLE No. 7. — *Summary of amounts of State-aid due on account of vocational agricultural education to and including Nov. 30, 1913.*

Tuition, total from Table No. 4,	\$1,362 81
Schools, total from Table No. 5,	8,662 76
Departments, total from Table No. 6,	4,469 11
Total,	\$14,494 68

TABLE NO. 8. — *State-aided vocational agricultural education; examples*

SCHOOL OR DEPARTMENT LOCATION.	Pupil's age.	Project or projects (title and scope).
1	2	3
Northampton, . . .	17	10 sq. rds. potatoes; 18 sq. rds. popcorn; 13 apple trees, .
" . . .	16	$\frac{1}{10}$ a. kitchen garden; 19 R. I. Reds,
" . . .	16	$\frac{1}{10}$ a. market gardening,
" . . .	15	22 R. I. Reds; $\frac{1}{2}$ a. corn,
" . . .	17	$\frac{1}{4}$ a. garden; 26 Wyandottes; 75 Barred Rocks; 1 a. corn, .
Petersham, . . .	15	13 hens; 71 chicks; 150 young apple trees; $\frac{1}{2}$ a. muskmelons,
" . . .	18	$\frac{1}{4}$ a. garden; 34 hens; 110 chicks,
" . . .	16	Pair O. I. C. Swine; $\frac{1}{2}$ a. garden,
" . . .	15	34 sheep; 24 old apple trees,
" . . .	16	18 fowl; 82 chicks; 4 grade cows; 335 young apple trees; corn, potatoes, mangels; $\frac{1}{4}$ a. peach trees; 1 a. garden and orchard.
Hadley, . . .	15	15 hens; 5 sq. rds. kitchen garden,
" . . .	17	Small kitchen garden,
" . . .	19	5 Holsteins,
" . . .	16	$\frac{1}{20}$ a. kitchen garden,
" . . .	17	$\frac{1}{11}$ a. kitchen garden; 1 a. corn,
Northborough, . . .	18	$\frac{1}{2}$ a. field corn, poultry,
" . . .	18	Poultry,
" . . .	18	$\frac{1}{2}$ a. garden; poultry,
" . . .	18	1 a. corn; poultry,
" . . .	15	Poultry,
Harwich, . . .	15	16 hens; $\frac{1}{2}$ a. corn; $\frac{1}{4}$ a. beans; $\frac{1}{8}$ a. potatoes; $\frac{1}{10}$ a. garden, $\frac{1}{2}$ a. garden.
" . . .	17	$\frac{1}{2}$ a. garden; 18 white Wyandottes,
" . . .	19	$\frac{1}{8}$ a. garden; 145 R. I. Reds; $\frac{1}{8}$ a. potatoes,
" . . .	19	$\frac{1}{2}$ a. corn; $\frac{1}{2}$ a. potatoes; 1 a. garden; 30 birds, mixed breeds; 150 apple and peach trees.
" . . .	16	45 birds, mixed breeds,
North Easton, . . .	15	39 R. I. Reds; garden,
" . . .	16	18 R. I. Reds; garden,
" . . .	14	10 R. I. Reds; garden,
" . . .	18	$\frac{1}{2}$ a. garden; 1 cow,
" . . .	16	40 hens; $\frac{1}{2}$ a. garden; 2 cows,
Total for 30 pupils,

¹ Loss of 65 cents on project with apple trees.

of the income of pupils from farm work during attendance at school.

PUPIL'S PROJECT INCOME.			OTHER FAMILY INCOME FROM PUPIL'S PROJECT.			CASH OR CREDIT RECEIVED BY PUPIL FROM FARM WORK DURING PROJECT PERIOD.			
Net profit.	Paid self for labor.	Total.	Labor, man or horse.	Rent, seed, etc.	Total.	At home.	Away from home.	His own project.	Grand total.
4	5	6	7	8	9	10	11	12	13
\$40 75 ¹	\$12 05	\$52 80	\$4 90	\$15 30	\$20 20	\$150 00	-	\$52 80	\$202 80
43 66	8 00	51 66	-	1 00	1 00	-	\$155 50	51 66	207 16
11 00	4 27	15 27	-	1 00	1 00	-	217 00	15 27	232 27
138 47	19 30	157 77	6 20	8 00	14 20	208 00	7 25	157 77	373 02
141 07	63 89	204 96	37 28	5 50	42 73	56 20	-	204 96	261 16
146 05	77 80	223 85	34 21	12 00	46 21	148 10	-	223 85	371 95
60 15	46 00	106 15	4 50	3 15	7 65	84 90	85 00	106 15	276 05
51 50	51 60	103 10	5 80	15 45	21 25	53 80	1 20	103 10	158 10
82 63	11 20	93 83	-	-	-	179 80	9 60	93 83	283 23
742 02	143 43	885 45	76 44	125 45	201 89	268 30	14 40	867 45	1,150 15
35 05	18 50	53 55	1 00	2 50	3 50	-	95 50	53 35	148 85
5 74	4 50	10 24	2 50	56	3 06	40 00	85 65	10 24	135 89
500 00	45 00	545 00	45 00	250 00	295 00	129 00	5 50	545 00	679 50
7 62	10 80	18 42	1 50	2 00	3 50	200 00	1 00	18 42	219 42
45 30	16 10	61 40	6 85	20 00	26 85	142 00	30 00	61 40	233 40
100 85 ²	16 95	117 80	-	7 50 ²	7 50	200 00	5 00	117 80	322 80
271 25 ²	-	271 25	-	-	-	388 00	-	271 25	659 25
45 88 ²	45 00	90 88	-	29 90 ²	29 90	247 00	65	90 88	388 53
69 35	49 25	118 60	-	-	-	322 00	-	118 60	440 60
15 40	8 00	23 40	-	-	-	177 00	40 00	23 40	240 40
147 85	25 00	172 85	6 00	4 50	10 50	96 00	17 00	172 85	285 85
22 00	15 00	37 00	-	50	50	44 00	12 00	37 00	93 00
48 00	27 25	75 25	-	2 00	2 00	92 00	-	75 25	167 25
121 50	51 90	173 40	8 60	16 00	24 60	168 00	30 00	173 40	371 40
185 50	6 92	192 42	12 83	1 15	13 98	256 50	137 50	192 42	586 42
113 99	27 90	141 89	5 00	14 00	19 00	5 00	15 00	141 89	161 89
55 45	5 00	60 45	1 00	85	1 85	10 00	160 00	60 45	230 45
49 11	10 00	59 11	1 00	1 50	2 50	206 00	80	59 11	265 91
22 10	19 50	41 60	1 50	45 00	46 50	26 95	140 00	41 60	208 55
122 13	35 45	157 58	8 92	13 00	21 92	-	266 00	157 58	423 58
\$3,423.37	\$375.56	\$4,298.93	\$270.98	\$597.81	\$868.79	\$3,898.55	\$1,531.55	\$4,298.73	\$9,728.03

¹ Estimate.

XV. COUNTY TRAINING SCHOOLS.

There are at present 6 county training schools, for the commitment of habitual truants, absentees and school offenders. These schools are located as follows: —

COUNTY TRAINING SCHOOLS.	Location.	Superintendents.
Essex,	Lawrence,	W. Grant Fancher.
Hampden,	Springfield,	Charles E. Butler.
Middlesex,	North Chelmsford,	Rufus E. Corlew.
Norfolk, Bristol and Plymouth,	Walpole,	James H. Craig.
Suffolk ¹ (Boston Parental),	West Roxbury,	George C. Minard.
Worcester,	Oakdale,	Stephen P. Streeter.

¹ Under the law commitments from Chelsea, Revere and Winthrop in Suffolk County must be to the training school for the county of Middlesex.

The counties of Barnstable, Berkshire, Dukes, Franklin, Hampshire and Nantucket are exempted by law from maintaining training schools of their own, but the county commissioners of each of these counties are required to assign an established training school as a place of commitment for habitual truants, absentees and school offenders. The places designated by the several commissioners are as follows: —

COUNTY.	Location of assigned training school.	COUNTY.	Location of assigned training school.
Barnstable,	Walpole.	Franklin,	North Chelmsford.
Berkshire,	Springfield.	Hampshire,	North Chelmsford.
Dukes,	Walpole.	Nantucket,	- -

Table showing the number of pupils attending, admitted and discharged.

COUNTY TRAINING SCHOOLS.	Number at beginning of year.	Number admitted during the year.	Number discharged during the year.	Number at close of the year.	During year ending —
Essex,	141	32	48	125	Dec. 31, 1912
Hampden,	37	36	36	37	Oct. 31, 1913
Middlesex,	174	54	53	175	Dec. 31, 1912
Norfolk, Bristol and Plymouth,	48	29	33	44	Nov. 30, 1913
Suffolk (Boston Parental),	123	92	86	129	Jan. 31, 1913
Worcester,	65	34	27	72	Oct. 31, 1913
Totals,	588	277	283	582	-

XVI. ACADEMIES.

Table showing the number, attendance, amount of tuition, etc., for the school year 1912-13.

CITIES AND TOWNS.	Number of academies.	Number of different academy pupils attending during the year.	Estimated amount of tuition paid in academies.	FUNDS WHOSE INCOME MUST BE APPROPRIATED TO ACADEMIES.	
				Principal.	Income.
Andover,	2	693	\$88,605 56	\$1,373,391 83	\$44,553 94
Ashburnham,	1	203	13,537 00	364,937 00	9,129 00
Belmont,	1	25	1,700 00	12,000 00	-
Boston,	4	787	38,962 82	552,800 00	44,087 81
Braintree,	1	108	1,000 00	325,000 00	19,000 00
Brimfield,	1	57	-	86,835 63	5,492 51
Chicopee,	1	56	-	-	-
Concord,	1	116	87,100 00	508,363 02	540 00
Danvers,	1	286	11,106 00	300,000 00	7,700 00
Deerfield,	-	-	-	53,012 89	2,069 40
Fall River,	4	356	-	-	-
Franklin,	1	232	10,785 00	335,000 00	7,115 00
Gill,	1	921	72,495 00	721,656 00	29,219 00
Groton,	1	41	2,040 00	100,000 00	4,400 00
Hadley,	-	-	-	110,000 00	5,000 00
Harvard,	1	41	-	100,000 00	4,000 00
Hatfield,	1	25	-	-	-
Haverhill,	1	133	-	-	-
Hingham,	1	40	600 00	25,000 00	1,000 00
Lancaster,	1	312	10,068 65	66,792 23	2,684 70
Lenox,	1	32	4,373 68	-	-
Lowell,	2	189	27,000 00	140,000 00	5,600 00
Marion,	-	-	-	250,000 00	12,000 00
Milford,	1	371	-	-	-
Monson,	1	37	5,035 00	109,633 35	5,363 36
New Bedford,	1	58	6,000 00	-	-
New Salem,	-	-	-	11,000 00	450 00
Newton,	2	268	66,550 00	-	-
Northampton,	1	156	-	364,000 00	13,402 90
Northfield,	1	617	49,244 30	1,708,441 00	23,408 00
Sherborn,	-	-	-	21,899 50	1,206 71
Southborough,	1	141	112,800 00	-	-

*Table showing the number, attendance, amount of tuition, etc. —
Concluded.*

CITIES AND TOWNS.	Number of academies.	Number of different academy pupils attending during the year.	Estimated amount of tuition paid in academies.	FUNDS WHOSE INCOME MUST BE APPROPRIATED TO ACADEMIES.	
				Principal.	Income.
Taunton,	1	24	\$1,152 00	\$29,595 26	\$605 27
Wellesley,	2	445	-	-	-
Wilbraham,	1	32	11,440 00	292,677 00	65,405 00
Worcester,	2	385	10,300 00	105,000 00	4,500 00
Totals (36),	42	7,187	\$631,895 01	\$8,067,034 71	\$342,112 60

XVII. PRIVATE SCHOOLS.

*Table showing the number, attendance, amount of tuition, etc., for the school
year 1912-13.*

CITIES AND TOWNS.	Number of private schools.	Number of different private school pupils attending during the year.	Estimated amount of tuition paid in private schools.	FUNDS WHOSE INCOME MUST BE APPROPRIATED TO PRIVATE SCHOOLS.	
				Principal.	Income.
Adams,	2	808	-	-	-
Agawam,	1	130	\$600 00	-	-
Amesbury,	2	658	12,000 00	\$60,000 00	-
Andover,	1	14	1,596 00	-	-
Attleborough,	2	300	-	-	-
Barre,	1	43	-	-	-
Blandford,	1	13	-	3,000 00	-
Boston,	84	26,627	468,481 99	5,504,242 19	\$300,946 22
Brookton,	2	1,355	-	-	-
Brookline,	2	660	14,460 00	-	-
Cambridge,	14	4,472	47,850 00	-	-
Chelsea,	3	2,388	-	-	-
Chicopee,	4	1,604	-	-	-
Clinton,	2	604	-	-	-
Concord,	2	72	24,600 00	40,000 00	-
Dedham,	2	63	4,000 00	-	-
Duxbury,	1	49	650 00	75,000 00	-
Easthampton,	2	380	-	-	-
Fall River,	18	6,145	1,800 00	14,000 00	-

*Table showing the number, attendance, amount of tuition, etc. —
Continued.*

CITIES AND TOWNS.	Number of private schools.	Number of different private school pupils attending during the year.	Estimated amount of tuition paid in private schools.	FUNDS WHOSE INCOME MUST BE APPROPRIATED TO PRIVATE SCHOOLS.	
				Principal.	Income.
Framingham,	1	33	\$10,000 00	-	-
Gloucester,	1	251	1,800 00	-	-
Groton,	1	161	136,850 00	\$700,000 00	\$8,000 00
Hardwick,	1	205	-	-	-
Haverhill,	5	1,991	-	-	-
Hingham,	1	25	2,500 00	-	-
Holyoke,	11	5,473	5,180 00	-	-
Hudson,	1	12	300 00	-	-
Lawrence,	11	5,187	-	-	-
Lee,	1	208	-	-	-
Leicester,	1	53	-	85,000 00	6,000 00
Leominster,	1	708	-	80,000 00	-
Longmeadow,	1	30	-	-	-
Lowell,	13	9,648	2,000 00	-	-
Lynn,	12	3,537	-	-	-
Malden,	5	2,115	-	-	-
Marlborough,	3	744	3,600 00	45,000 00	-
Medford,	2	41	3,040 00	-	-
Methuen,	1	140	-	-	-
Milford,	1	415	-	-	-
Millbury,	1	40	3,362 49	31,000 00	-
Montague,	1	225	-	-	-
Natick,	1	85	14,000 00	65,000 00	-
New Bedford,	11	4,131	45,000 00	-	-
Newton,	11	1,440	111,678 00	-	-
North Adams,	2	1,268	-	-	-
Northampton,	5	939	-	-	-
Orleans,	1	14	7,000 00	6,000 00	-
Palmer,	2	257	-	-	-
Peabody,	1	676	-	-	-
Pittsfield,	3	738	-	-	-
Provincetown,	1	20	-	-	-
Quincy,	4	795	30,000 00	625,000 00	14,000 00
Salem,	7	3,802	-	-	-

Table showing the number, attendance, amount of tuition, etc.—
Concluded.

CITIES AND TOWNS.	Number of private schools.	Number of different private school pupils attending during the year.	Estimated amount of tuition paid in private schools.	FUNDS WHOSE INCOME MUST BE APPROPRIATED TO PRIVATE SCHOOLS.	
				Principal.	Income.
Shirley,	1	151	\$1,500 00	\$5,000 00	\$400 00
Somerville,	2	1,970	-	-	-
Southbridge,	3	1,446	-	-	-
Spencer,	1	480	-	-	-
Springfield,	10	2,495	-	-	-
Stoughton,	1	502	-	-	-
Sutton,	1	184	-	-	-
Taunton,	3	1,376	-	-	-
Waltham,	5	1,994	4,100 00	82,000 00	700 00
Ware,	1	417	-	-	-
Warren,	1	230	400 00	22,000 00	-
Webster,	4	1,552	-	-	-
Wellesley,	2	58	-	-	-
West Bridgewater,	1	26	3,975 00	147,000 00	6,000 00
Westfield,	1	377	-	-	-
Whitman,	1	15	-	-	-
Winchester,	1	17	2,175 00	150 00	-
Woburn,	1	624	-	-	-
Worcester,	10	4,964	26,350 00	49,900 00	9,700 00
Totals (72),	321	110,670	\$990,828 48	\$7,639,292 19	\$345,746 22

XVIII. MASSACHUSETTS SCHOOL FUND.

The following statement shows the condition of the Massachusetts school fund:—

Amount of the fund Jan. 1, 1913,	\$5,000,000 00
Amount of fund Dec. 31, 1913,	5,000,000 00
Income for 1913,	228,758 79
Paid to towns in the distribution of Jan. 25, 1914,	228,758 79

The following table shows the amount of the principal of the Massachusetts school fund and the annual income from 1900 to 1913:—

YEAR.	Principal.	Income.
1900,	\$4,370,548 14	\$213,066 18
1901,	4,470,548 14	366,656 51
1902,	4,570,548 14	220,731 77
1903,	4,670,548 14	197,379 93
1904,	4,780,110 66	214,224 13
1905,	4,880,110 66	219,379 32
1906,	4,980,110 66	224,468 31
1907,	5,000,000 00	228,621 22
1908,	5,000,000 00	229,439 73
1909,	5,000,000 00	231,173 87
1910,	5,000,000 00	238,748 72
1911,	5,000,000 00	227,664 36
1912,	5,000,000 00	228,558 32
1913,	5,000,000 00	228,758 79

XIX. FINANCIAL STATEMENT OF THE BOARD OF EDUCATION, DEC. 1, 1912, TO NOV. 30, 1913.

SALARIES OF COMMISSIONER, DEPUTY COMMISSIONERS, AGENTS, ASSISTANTS, AND FOR CLERICAL AND MESSENGER SERVICE.

Dr.

Cr.

1913.	1912.	Appropriation (chapter 143, Acts of 1913),	\$48,300 00
Commissioner:— David Snedden, Deputy commissioners:— William Orr, Robert O. Small, Regular agents:— Julius E. Warren, Charles R. Allen, Rufus W. Stimson, Edward C. Baldwin, Clarence D. Kingsley, Walter I. Hamilton, James F. Hopkins, Eva W. White, Special agents and assistants:— Helen R. Hildreth, Frederick W. Turner, Nellie M. Wilkins, E. E. McNary, Richard D. Kimball Company, Arthur D. Little Company, Inc.,	\$6,500 00 4,500 00 1,333 33 2,500 00 3,500 00 3,500 00 2,500 00 2,500 00 2,500 00 1,500 00 1,125 01 666 65 1,049 08 200 00 44 00 224 80 436 00		

Clerks and stenographers: —			
A. C. Blake,	1,500 00		
Esther E. Elwell,	1,116 05		
George H. Varney,	1,254 90		
Sarah A. Holt,	1,000 00		
Miriam P. Clark,	1,000 00		
Anna M. Murray,	853 80		
Gertrude M. Cloney,	782 50		
Astrid E. Ahl,	773 77		
Vivien Thyng,	458 50		
Mary E. Biggane,	603 15		
Arthur Platt,	309 50		
Dagmar H. Svedeman,	371 25		
Florence McCloskey,	78 00		
Alice Fairbrother,	36 00		
Mary A. Walsh,	106 66		
Extra clerical and stenographic service,	1,625 28		
	\$46,448 23	\$48,300 00	
Balance unexpended,	1,851 77		\$48,300 00

Cr.

TRAVELING EXPENSES OF COMMISSIONER, DEPUTIES, AGENTS AND ASSISTANTS.

Dr.

1913.		1913.	Appropriation (chapter 143, Acts of 1913),	\$5,000 00
David Snedden,	\$427 55			
William Orr,	388 79			
Robert O. Small,	225 88			
Charles R. Allen,	363 20			
Rufus W. Stimson,	988 75			
Julius E. Warren,	661 29			
Edward C. Baldwin,	696 95			
Walter I. Hamilton,	171 07			
Clarence D. Kingsley,	299 46			
James F. Hopkins,	224 61			
Eva W. White,	223 93			
Frederick W. Turner,	29 20			
Helen R. Hildreth,	37 25			
Nellie M. Wilkins,	22 23			
George H. Varney,	13 83			
Miriam P. Clark,	1 55			
Anna M. Murray,	25 04			
E. F. Van Amburg,	2 00			
David Elder,	3 80			
John H. Fay,	4 88			
E. J. Burke,	5 30			
L. B. Boston,	10 99			
Thomas Bradlee,	6 64			
E. E. McNary,	20 15			
Gertrude M. Cloney,	2 58			
Richard D. Kimball Company,	61 84			
Carlow Auto Company, Inc.,	33 50			
Balance unexpended,	\$4,952 26			
	47 74			
	\$5,000 00			\$5,000 00

Cr.

PRINTING AND BINDING ANNUAL REPORT AND BULLETINS.

Dr.

1913.	5,000 copies, seventy-sixth annual report, Electrotypes, 3,000 copies, Support of Public Education, 2,000 copies, Union Superintendents in Massachusetts, 500 copies, List of Superintendents of Schools, 500 copies, State-aided Vocational Education, 2,000 copies, Vocational Agricultural Education, 1,500 copies, Scope and Value of Art Education, 2,000 copies, Programs and Schedules for Smaller High Schools, 3,500 copies, Educational Legislation, 1913, 3,000 copies, Supervision of Teaching in Rural Elementary Schools, 3,000 copies, Project Study Outlines for Vegetable Growing,	1911.	Appropriation (chapter 143, Acts of 1913),	\$5,000 00
	\$2,608 43 18 35 179 53 31 70 14 00 10 05 18 10 51 20 71 50 181 01 160 06 669 33			
Balance unexpended,	\$4,013 26 986 74		\$5,000 00	\$5,000 00

Cr.

REGISTERS, CENSUS BOOKS, AND OTHER SCHOOL BLANKS.

Dr.

1913.		1913.	Appropriation (chapter 143, Acts of 1913),	\$2,000 00
1,200 copies, school return blank,	\$83 13			
200 printed postal cards,	4 00			
1,750 school census books,	390 28			
20,000 school registers,	757 95			
Expressage,	93 06			
Balance unexpended,	\$1,328 42			
	671 58			
		\$2,000 00		\$2,000 00

TEACHERS' INSTITUTES.

1913.		1913.	Appropriation (chapter 143, Acts of 1913),	\$200 00
Paid for services of instructors and their expenses at institutes held at Sturbridge, Charlton, Sutton, Lanesborough, West Stockbridge, Otis, Charlemont, Colrain, Leverett, West Brookfield, Belchertown and Erving,	\$194 77			
Printing programs,	2 30			
Notebooks and pencils,	2 93			
		\$200 00		\$200 00

COUNTY TEACHERS' ASSOCIATIONS.

1913.		1913.	Appropriation (chapter 143, Acts of 1913),	\$700 00
Barnstable County Teachers' Association,	\$50 00			
Berkshire County Teachers' Association,	50 00			
Bristol County Teachers' Association,	50 00			
Dukes County Teachers' Association,	50 00			
Essex County Teachers' Association,	50 00			
Franklin County Teachers' Association,	100 00			
Hampden County Teachers' Association,	50 00			
Hampshire County Teachers' Association,	50 00			
Middlesex County Teachers' Association,	50 00			
Nantucket County Teachers' Association,	50 00			
Norfolk County Teachers' Association,	50 00			
Plymouth County Teachers' Association,	50 00			
Worcester County Teachers' Association,	50 00			
		\$700 00		\$700 00

MASSACHUSETTS TEACHERS' ASSOCIATION.

DR.

CR.

1913.	Massachusetts Teachers' Association,	\$600 00	1913.	Appropriation (chapter 143, Acts of 1913), Balance from 1912,	\$300 00 300 00
					\$600 00

SUPERINTENDENCY UNIONS.

1913.	Paid to the following-named unions:—		1913.	Appropriation (chapter 143, Acts of 1913),	\$86,200 00
	Cheshire, Hancock, Lanesborough, New Ashford,	\$1,250 00			
	East Longmeadow, Hampden, Longmeadow, Wilbraham,	1,250 00			
	Avon, Holbrook, Randolph,	1,250 00			
	Dana, Greenwich, New Salem, Prescott,	1,250 00			
	Amherst, Pelham,	250 00			
	Ashburnham, Winchendon,	416 67			
	Bellingham, Hopedale, Mendon,	833 34			
	Becket, Chester, Middlefield,	1,250 00			
	Brimfield, Monson,	1,250 00			
	Buckland, Colrain, Shelburne,	1,250 00			
	Brewster, Dennis, Yarmouth,	1,250 00			
	New Braintree, Sturbridge, West Brookfield,	1,250 00			

Hinsdale, Peru, Washington, Windsor,	1,250 00		
Acton, Littleton, Carlisle, West- ford,	1,250 00		
Seekonk, Somerset, Swansea, Clarksburg, Florida, Monroe, Savoy,	1,250 00		
Merrimac, Newbury, Salisbury, West Newbury,	1,250 00		
Berkley, Dighton, Rehoboth, Halifax, Kingston, Pembroke, Plympton,	1,250 00		
Dover, Sudbury, Wayland, Bourne, Mashpee, Sandwich, Agawam, Ludlow,	1,000 00		
Acushnet, Fairhaven, Mattapoi- sett,	687 50		
Holland, Wales, Warren,	500 00		
Charlton, Leicester,	416 67		
Sheffield, New Marlborough, Mount Washington,	1,250 00		
Charlemont, Hawley, Heath, Rowe,	1,250 00		
Gill, Leyden, Northfield, War- wick,	1,250 00		
Brookfield, North Brookfield, Freetown, Westport,	1,250 00		
Auburn, Sutton,	1,250 00		
Amount carried forward,	\$34,104 18	Amount carried forward,	\$86,200 00

Dr.	SUPERINTENDENCY UNIONS — Continued.	Cr.
1913.	<i>Amount brought forward,</i>	\$34,104 18
	Paid to the following-named unions— <i>Continued.</i>	
	Chilmark, Gay Head, Edgartown, Oak Bluffs, Tisbury, West Tisbury, . . .	
	Bedford, Belmont, Burlington, Holden, Oakham, Paxton, Rutland, . . .	1,250 00
	Ashby, Lunenburg, Townsend, Hanover, Hanson, Norwell, . . .	625 00
	Barre, Hardwick, Petersham, Ashland, Hopkinton, . . .	1,250 00
	Conway, Deerfield, Sunderland, Whately, . . .	1,250 00
	Abington, Bridgewater, Belchertown, Enfield, . . .	1,250 00
	Bernardston, Hadley, Hatfield, Blandford, Huntington, Montgomery, Russell, . . .	1,250 00
	Duxbury, Marshfield, Scituate, Easthampton, Southampton, Westhampton, . . .	1,250 00
	Granville, Sandisfield, Southwick, Tolland, . . .	833 34
	Lee, Otis, Monterey, Tyngham,	500 00
		1,250 00
		1,041 66
		<i>Amount brought forward,</i>
		\$86,200 00

Medfield, Millis, Norfolk, West- wood,	781 25		
Princeton, Sterling, Westmin- ster,	1,250 00		
Provincetown, Truro, Wellfleet, Dracut, Wilmington, Tewks- bury, North Reading, Tyngs- borough,	1,250 00		
Berlin, Northborough, Shrews- bury, Southborough,	1,250 00		
Georgetown, Groveland, Rowley, Boxford,	1,250 00		
Hubbardston, Phillipston, Roy- alston, Templeton,	1,250 00		
Millbury, Oxford,	1,250 00		
Ashfield, Cunningham, Goshen, Plainfield,	1,041 66		
Chatham, Eastham, Harwich, Orleans,	937 50		
Billerica, Stoneham,	500 00		
Grafton, Upton,	1,250 00		
Bellingham, Hopedale, Mendon, Granby, South Hadley,	69 44		
Erving, Leverett, Shutesbury, Wendell,	1,250 00		
Alford, Egremont, Richmond, West Stockbridge,	1,250 00		
<i>Amount carried forward,</i>	\$68,506 95	<i>Amount carried forward,</i>	\$86,200 00

Bernardston, Hadley, Hatfield, Mansfield, Sharon, Stoughton, .	260 41 250 00			
Balance unexpended,	\$80,374 99 5,825 01	\$86,200 00		\$86,200 00

HIGH SCHOOL TUITION, ETC.

1913.	High school tuition reimbursement as per detail on pages 200-206, . \$500 grants to high schools as per detail on page 197, Transportation of children living on islands,	\$47,711 09 24,000 00 1,002 80 \$72,713 89 6,286 11	1913.	Appropriation (chapter 143, Acts of 1913),	\$79,000 00
	Balance unexpended,	\$79,000 00			\$79,000 00

INSTRUCTION OF ADULT BLIND AT THEIR HOMES.

1913.	Paid for services and expenses of teachers instructing the adult blind at their homes,	\$4,795 59 204 41	1913.	Appropriation (chapter 143, Acts of 1913),	\$5,000 00
	Balance unexpended,	\$5,000 00			\$5,000 00

Dr.	EDUCATION OF DEAF CHILDREN.	Cr.	
1913.		1913.	Appropriation (chapter 143, Acts of 1913), Deficiency,
Sarah Fuller Home:— 11 pupils, quarter ending Jan. 1, 1913,	\$662 50		\$112,000 00
Henry L. Wildes:— Transportation of pupils to and from the Horace Mann School, American School:— 37 pupils, quarter beginning Dec. 1, 1912,	44 35		993 15
Clarke School:— 116 pupils, quarter beginning Jan. 1, 1913,	2,543 75		
Boston School:— 147 pupils, half year ending Jan. 31, 1913,	10,155 00		
Horace Mann School:— 130 pupils, Feb. 1 to July 1, 1913,	19,780 85		
Traveling expenses of pupils, Nov. 11, 1912 to Feb. 10, 1913, American School:—	9,900 00		
37 pupils, quarter beginning March 1, 1913,	752 85		
Clarke School:— 116 pupils, quarter beginning April 1, 1913,	2,543 75		
	10,101 25		

Sarah Fuller Home: — 12 pupils, quarter ending April 1, 1913,	660 15			
American School: — 37 pupils, quarter beginning June 1, 1913,	2,543 75			
Boston School: — 146 pupils, half year ending June 18, 1913,	19,882 50			
Horace Mann School: — Traveling expenses, Feb. 10 to May 10, 1913,	883 94			
Sarah Fuller Home: — 11 pupils, quarter ending July 1, 1913,	662 50			
Clarke School: — 116 pupils, quarter beginning July 1, 1913,	10,106 25			
American School: — Clothing for pupils to July 1, 1913,	149 96			
Perkins Institution: — Board and tuition of Louis Yott, deaf-blind pupil, year ending June, 1913,	700 00			
Horace Mann School: — Traveling expenses, May 12 to June 19, 1913,	435 44			
<i>Amount carried forward, . . .</i>	\$92,508 79	<i>Amount carried forward,</i>		\$112,993 15

Cr.

EDUCATION OF DEAF CHILDREN — *Concluded.*

Dr.

1913.	<i>Amount brought forward,</i>	\$92,508 79	1913.	<i>Amount brought forward,</i>	\$112,993 15
	Sarah Fuller Home: — 7 pupils, quarter ending Oct. 1, 1913,	371 41			
	American School: — 42 pupils, quarter beginning Sept. 1, 1913,	2,887 50			
	Clarke School: — 116 pupils, quarter beginning Oct. 1, 1913,	10,044 35			
	Horace Mann School: — 136 pupils, Sept. 10 to Nov. 30, 1913,	6,480 00			
	Traveling expenses Sept. 10 to Nov. 1, 1913,	701 10			
		\$112,993 15			\$112,993 15

RECEIPTS.

1913.	Treasurer of the Commonwealth, .	\$506 50	1912.	Registration of teachers, Rebate on express packages, .	\$506 00 50
			\$506 50		\$506 50

AID TO NORMAL SCHOOL PUPILS.

1912.		\$1,161 75 73 83 472 20 261 48 736 40 107 55 512 08 569 34 105 37	\$4,000 00	1913.	Appropriation (chapter 143, Acts of 1913),	\$4,000 00
	Bridgewater Normal School (99 pupils), Fitchburg Normal School (6 pupils), Framingham Normal School (41 pupils), Hyannis Normal School (22 pupils), Lowell Normal School (70 pupils), North Adams Normal School (9 pupils), Salem Normal School (44 pupils), Westfield Normal School (48 pupils), Worcester Normal School (9 pupils),					
			\$4,000 00			\$4,000 00

Receipts reverting to State Treasury.

1912.	Paid to Treasurer of the Commonwealth,	1913.		Received from: — Charges to pupils (tuition of outside pupils, etc.), . . . Sale of supplies, etc., . . . Miscellaneous,	
		\$1,625 91	\$1,625 91		
					\$750 00 798 23 77 68 \$1,625 91

Boarding Hall.

1912.	Expended for: — Salaries, wages and labor, . . Food, Supplies, Balance unexpended,	1913.		Balance Dec. 1, 1912, . . Receipts,	
		\$10,824 95 23,812 03 4,532 66 \$39,169 64 10,994 62	\$50,164 26		
					\$9,350 73 40,813 53 \$50,164 26

FITCHBURG NORMAL SCHOOL.

Maintenance.

Dr.	Maintenance.	Cr.
1913. Expended for: — Salaries, wages and labor, . . . Furnishings, . . . Heat, light and power, . . . Repairs and improvements, . . . Grounds, . . . Supplies, normal school, . . . Supplies, training school, . . . Supplies, office and other, . . . Miscellaneous, . . . Balance unexpended, . . .	\$50,192 66 1,121 58 5,150 56 4,689 31 737 92 2,043 07 1,521 56 651 06 1,303 72 \$67,411 44 2 10	1912. Appropriation (chapter 143, Acts of 1913), . . . City of Fitchburg (account of training school), . . . \$52,153 00 15,260 54 \$67,413 54

Receipts reverting to State Treasury.

1913.	Paid to Treasurer of the Commonwealth,	\$514 58	1913.		Received from: — Charges to pupils (tuition of outside pupils, etc.), . . . Sale of supplies, etc., . . . Miscellaneous,	\$350 00 73 82 90 76 \$514 58
		\$514 58				

Boarding Hall.

1913.	Expended for: — Salaries, wages and labor, . . Food, Supplies, Balance unexpended,	\$2,748 60 7,352 47 3,905 76 \$14,006 83 1,615 64	1913.		Balance Dec. 1, 1912, . . . Receipts,	\$3,740 65 11,881 82 \$15,622 47
		\$15,622 47				

FRAMINGHAM NORMAL SCHOOL.

Maintenance.

Dr.	Cr.		
	1913.	1913.	Appropriation (chapter 143, Acts of 1913),
1913.			\$56,621 00
Expended for:—			
Salaries, wages and labor,	\$40,829 09		
Furnishings,	1,018 48		
Heat, light and power,	4,563 45		
Repairs and improvements,	4,411 79		
Grounds,	454 22		
Supplies, normal school,	3,176 48		
Supplies, training school,	150 27		
Supplies, office and other,	1,067 78		
Miscellaneous,	860 84		
	\$56,532 40		
Balance unexpended,	88 60	\$56,621 00	\$56,621 00

Receipts reverting to State Treasury.

1913.	Paid to Treasurer of the Commonwealth,	\$1,038 27		1913.	Received from: — Charges to pupils (tuition of outside pupils, etc.), . . . Sale of supplies, Miscellaneous,	\$418 97 371 93 247 37 \$1,038 27
			\$1,038 27			

Boarding Hall.

1913.	Expended for: — Salaries, wages and labor, . . Food, Supplies, Balance unexpended,	\$5,979 12 9,996 29 3,512 37 \$19,487 78 7,144 01		1913.	Balance Dec. 1, 1912, . . . Receipts,	\$6,229 00 20,402 79 \$26,631 79
			\$26,631 79			

Dr.	Maintenance.		Cr.
1913.	Expended for:—		
	Salaries, wages and labor, . . .	\$20,583 81	
	Furnishings, . . .	542 56	
	Heat, light and power, . . .	1,703 34	
	Repairs and improvements, . . .	1,867 95	
	Grounds, . . .	148 54	
	Supplies, normal school, . . .	1,086 42	
	Supplies, training school, . . .	41 05	
	Supplies, office and other, . . .	419 89	
	Miscellaneous, . . .	631 33	
	Balance unexpended, . . .	\$27,024 89	
		11	
			\$27,025 00
			Appropriation (chapter 143, Acts of 1913), . . .
			\$27,025 00

Receipts reverting to State Treasury.

1912.	Paid to Treasurer of the Commonwealth,	\$822 08	1913.	Received from: — Charges to pupils (tuition of outside pupils, etc.), . . . Sale of supplies, etc., . . . Miscellaneous,	\$405 00 147 51 269 57
			\$822 08		\$822 08

Boarding Hall.

1912.	Expended for: — Salaries, wages and labor, . . Food, Supplies,	\$3,988 25 9,892 08 1,220 24	1913.	Balance Dec. 1, 1912, . . . Receipts,	\$2,641 63 15,298 61
	Balance unexpended,	\$15,100 57 2,839 67	\$17,940 24		\$17,940 24

LOWELL NORMAL SCHOOL.

Maintenance.

Cr.

Dr.

1913.	Expended for: —		1912.	Appropriation (chapter 143, Acts of 1913),	\$35,007 00
	Salaries, wages and labor,	\$26,331 83			
	Furnishings,	660 00			
	Heat, light and power,	1,037 67			
	Repairs and improvements,	956 60			
	Grounds,	285 85			
	Supplies, normal school,	1,970 70			
	Supplies, training school,	1,400 00			
	Supplies, office and other,	447 71			
	Miscellaneous,	930 92			
		\$34,021 28			
	Balance unexpended,	985 72			
				\$35,007 00	\$35,007 00

NORTH ADAMS NORMAL SCHOOL — CONCLUDED.
Receipts reverting to State Treasury.

Cr.

Dr.

1913.	Paid to Treasurer of the Commonwealth,	1912.	Received from: — Charges to pupils (tuition of outside pupils, etc.), . . . Sale of supplies, etc., . . . Miscellaneous,	
	\$1,064 37			\$470 00 336 89 257 48 \$1,064 37

Boarding Hall.

1913.	Expended for: — Salaries, wages and labor, . . Food, Supplies, Balance unexpended,	1912.	Balance Dec. 1, 1912, . . . Receipts,	
	\$4,230 84 8,956 65 1,548 04 \$14,735 53 2,541 74			\$2,195 86 15,081 41 \$17,277 27

SALEM NORMAL SCHOOL.

Maintenance.

1913.	Expended for: — Salaries, wages and labor, Furnishings, Heat, light and power, Repairs and improvements, Grounds, Supplies, normal school, Supplies, training school, Supplies, office and other, Miscellaneous,		1913.	Appropriation (chapter 143, Acts of 1913), City of Salem (account of training school),	
		\$39,204 04 1,028 72 2,506 73 2,387 69 439 81 2,949 00 1,617 55 1,195 40 1,822 32			\$51,592 00 2,771 78
	Balance unexpended,	\$53,151 26 1,212 52			\$54,363 78

Receipts reverting to State Treasury.

1913.	Paid to Treasurer of the Commonwealth,		1913.	Received from: — Charges to pupils (tuition of outside pupils, etc.), Sale of supplies, etc., Miscellaneous,	
		\$636 61			\$400 00 128 94 107 67
					\$636 61

BOARD OF EDUCATION.

[Jan.

Dr.	Maintenance.		Cr.
1913.	Expended for:—	1913.	Appropriation (chapter 143, Acts of 1913),
	Salaries, wages and labor,		
	Furnishings,		
	Heat, light and power,		
	Repairs and improvements,		
	Grounds,		
	Supplies, normal school,		
	Supplies, training school,		
	Supplies, office and other,		
	Miscellaneous,		
	Balance unexpended,		
			\$40,264 00
			\$40,264 00

Receipts reverting to State Treasury.

1913.	Paid to Treasurer of the Commonwealth,	\$639 19	1913.	Received from: — Charges to pupils (tuition of outside pupils, etc.), . . . Sale of supplies, etc., . . . Miscellaneous,	\$400 00 228 93 10 26 \$639 19

Boarding Hall.

1913.	Expended for: — Salaries, wages and labor, . . Food, Supplies, Balance unexpended,	\$2,794 79 7,995 10 1,513 17 \$12,303 06 5,218 01	1913.	Balance Dec. 1, 1912, . . . Receipts,	\$5,765 27 11,755 80 \$17,521 07

WORCESTER NORMAL SCHOOL.

Cr.

Maintenance.

Dr.

1913.	1913.	1913.	1913.
Expended for: — Salaries, wages and labor, . . . Furnishings, . . . Heat, light and power, . . . Repairs and improvements, . . . Grounds, . . . Supplies, normal school, . . . Supplies, training school, . . . Supplies, office and other, . . . Miscellaneous, . . . Balance unexpended, . . .	\$26,563 42 2,885 10 1,760 57 3,351 75 337 20 2,736 10 151 21 1,619 11 1,512 55 \$40,917 01 29	Appropriation (chapter 143, Acts of 1913), . . . Transferred from "small items" appropriation, . . .	\$40,818 00 99 30 \$40,917 30

Receipts reverting to State Treasury.

1913.	Paid to Treasurer of the Commonwealth,	1913.	Received from: — Charges to pupils (tuition of outside pupils, etc.), . . . Sale of supplies, etc., . . . Miscellaneous,	1913.
		\$437 25		\$75 00 39 25 323 00 \$437 25

Boarding Hall.

1913.	Expended for: — Salaries, wages and labor, . . Food, Supplies, Balance unexpended,	1913.	Balance Dec. 1, 1912, . . Receipts,	1913.
	\$537 77 2,364 05 60 17 \$2,961 99 1,018 06	\$3,980 05		\$482 81 3,497 24 \$3,980 05

RECAPITULATION.

Maintenance.

1913.		1913.	Appropriation (chapter 143, Acts of 1913), City of Fitchburg (account of training school), City of Salem (account of training school), Transferred from "small items" appropriation, Deficiency in 1912 (chapter 701, Acts of 1913),	
	Bridgewater Normal School,	\$69,856 55		\$463,818 00
	Fitchburg Normal School,	67,411 44		
	Frammingham Normal School,	56,532 40		15,260 54
	Hyannis Normal School,	27,024 89		
	Lowell Normal School,	34,021 28		2,771 78
	North Adams Normal School,	43,768 58		
	Salem Normal School,	53,151 26		99 33
	Westfield Normal School,	40,167 26		
	Worcester Normal School,	40,917 01		70 55
	Normal Art School (Boston),	46,663 05		
	Balance unexpended,	\$479,513 72		
		2,506 48		
		\$482,020 20		\$482,020 20

RECAPITULATION — CONCLUDED.

Receipts reverting to State Treasury.

Cr.

Dr.

1913.	Paid to Treasurer of the Commonwealth,	\$9,067 43	1913.	Received from: — Charges to pupils (tuition of outside pupils, etc.), . . . Sale of supplies, etc., . . . Miscellaneous,	\$5,538 97 2,132 36 1,396 10 \$9,067 43

Boarding Halls.

1913.	Expended for: — Salaries, wages and labor, . . Food, Supplies, Balance unexpended,	\$31,104 32 70,368 67 16,292 41 \$117,765 40 31,371 75	1913.	Balance Dec. 1, 1912, . . . Receipts,	\$30,405 95 118,731 20 \$149,137 15

AN ABSTRACT

OF THE

SCHOOL RETURNS MADE BY THE SCHOOL COMMITTEES
OF THE SEVERAL TOWNS AND CITIES IN
THE COMMONWEALTH

FOR

THE SCHOOL YEAR 1912-1913.

EXPLANATION.

The Abstract of School Returns includes statistics for school enrolment, membership, attendance, teaching force and expenditures for the school year, July 1, 1912, to June 30, 1913, together with a statement of the expenditure per pupil in the average membership for the following items: ¹—

General control: —
School committee: salaries.
Other expenses.
Superintendent's salary.
Other expenses.

Instruction: —
Supervisors: salaries.
Other expenses.
Principals.
Teachers.
Text-books.
Stationery, supplies and miscellaneous.

Operation of school plant: —
Janitors' service.
Fuel.
Miscellaneous expenses.

Maintenance of school plant: —
Repairs, replacement and upkeep.

Auxiliary agencies: —
Libraries.
Promotion of health.
Transportation.
Miscellaneous (tuition, etc.).
Total for support.

The column following that which gives the total expenditure of each town or city for any of the above items states the amount expended for said item per pupil in the average membership of the public schools. This latter column is headed, "Cost per Pupil in the Average Membership."

In addition there is given a statement of the cost for support of the public schools through local taxation and from other sources, including State aid, for the fiscal year of each town and city in the Commonwealth.

Attention is called to the arrangement and grouping of towns and cities in the abstract.

1. Cities and towns are listed in the order of population.
2. Three groups are recognized: —

Cities.

Towns of more than 5,000 population.

Towns of less than 5,000 population.

3. An alphabetical index list of cities and towns is given on pages iii-vii. The number placed before each name corresponds to the rank of the city or town in the abstract. By the use of this index the statistics of any particular city or town can easily be found.

¹ This classification is in accordance with the schedule recommended by the United States Bureau of Education, and is that used in the form of accounting prepared by the Board of Education for the use of school committees in towns of 5,000 population or less.

INDEX LIST OF CITIES AND TOWNS.

94 Abington.
174 Acton.
206 Acushnet.
43 Adams.
128 Agawam.
342 Alford.
55 Amesbury.
101 Amherst.
74 Andover.
52 Arlington.
177 Ashburnham.
277 Ashby.
271 Ashfield.
209 Ashland.
65 Athol.
37 Attleborough.
157 Auburn.
183 Avon.
145 Ayer.

112 Barnstable.
139 Barre.
272 Becket.
240 Bedford.
181 Belchertown.
205 Bellingham.
92 Belmont.
268 Berkley.
276 Berlin.
291 Bernardston.
29 Beverly.
146 Billerica.
90 Blackstone.
295 Blandford.
288 Bolton.
1 Boston.
153 Bourne.
338 Boxborough.

294 Boxford.
296 Boylston.
68 Braintree.
302 Brewster.
72 Bridgewater.
281 Brimfield.
12 Brockton.
167 Brookfield.
34 Brookline.
214 Buckland.
304 Burlington.

5 Cambridge.
109 Canton.
309 Carlisle.
210 Carver.
267 Charlemont.
182 Charlton.
215 Chatham.
103 Chelmsford.
21 Chelsea.
217 Cheshire.
230 Chester.
311 Chesterfield.
24 Chicopee.
339 Chilmark.
243 Clarksburg.
41 Clinton.
150 Cohasset.
201 Colrain.
81 Concord.
241 Conway.
301 Cummington.

126 Dalton.
292 Dana.
58 Danvers.
114 Dartmouth.

BOARD OF EDUCATION.

60 Dedham.	170 Groton.
165 Deerfield.	162 Groveland.
192 Dennis.	
163 Dighton.	185 Hadley.
171 Douglas.	310 Halifax.
285 Dover.	197 Hamilton.
130 Dracut.	299 Hampden.
117 Dudley.	318 Hancock.
327 Dunstable.	160 Hanover.
207 Duxbury.	194 Hanson.
	127 Hardwick.
131 East Bridgewater.	263 Harvard.
312 Eastham.	176 Harwich.
66 Easthampton.	186 Hatfield.
216 East Longmeadow.	14 Haverhill.
99 Easton.	324 Hawley.
245 Edgartown.	335 Heath.
303 Egremont.	104 Hingham.
279 Enfield.	254 Hinsdale.
249 Erving.	143 Holbrook.
213 Essex.	172 Holden.
19 Everett.	351 Holland.
	147 Holliston.
100 Fairhaven.	11 Holyoke.
3 Fall River.	169 Hopedale.
134 Falmouth.	155 Hopkinton.
17 Fitchburg.	260 Hubbardston.
330 Florida.	79 Hudson.
122 Foxborough.	179 Hull.
44 Framingham.	220 Huntington.
91 Franklin.	
222 Freetown.	87 Ipswich.
40 Gardner.	156 Kingston.
349 Gay Head.	
188 Georgetown.	250 Lakeville.
274 Gill.	154 Lancaster.
25 Gloucester.	273 Lanesborough.
340 Goshen.	9 Lawrence.
350 Gosnold.	120 Lee.
88 Grafton.	133 Leicester.
289 Granby.	137 Lenox.
287 Granville.	36 Leominster.
85 Great Barrington.	293 Leverett.
53 Greenfield.	106 Lexington.
321 Greenwich.	333 Leyden.

SCHOOL RETURNS.

v

247 Lincoln.	319 New Braintree.
242 Littleton.	219 Newbury.
257 Longmeadow.	32 Newburyport.
4 Lowell.	252 New Marlborough.
105 Ludlow.	300 New Salem.
228 Lunenburg.	16 Newton.
7 Lynn.	270 Norfolk.
275 Lynnfield.	27 North Adams.
13 Malden.	28 Northampton.
149 Manchester.	93 North Andover.
98 Mansfield.	57 North Attleborough.
73 Marblehead.	204 Northborough.
223 Marion.	62 Northbridge.
33 Marlborough.	136 North Brookfield.
202 Marshfield.	212 Northfield.
343 Mashpee.	261 North Reading.
239 Mattapoisett.	151 Norton.
82 Maynard.	226 Norwell.
129 Medfield.	70 Norwood.
26 Medford.	258 Oak Bluffs.
148 Medway.	308 Oakham.
30 Melrose.	97 Orange.
278 Mendon.	259 Orleans.
168 Merrimac.	315 Otis.
50 Methuen.	132 Oxford.
67 Middleborough.	64 Palmer.
334 Middlefield.	326 Paxton.
251 Middleton.	39 Peabody.
42 Milford.	317 Pelham.
111 Millbury.	234 Pembroke.
227 Millis.	140 Pepperell.
71 Milton.	346 Peru.
345 Monroe.	290 Petersham.
110 Monson.	323 Phillipston.
78 Montague.	22 Pittsfield.
331 Monterey.	328 Plainfield.
347 Montgomery.	229 Plainville.
352 Mount Washington.	48 Plymouth.
246 Nahant.	307 Plympton.
138 Nantucket.	337 Prescott.
56 Natick.	284 Princeton.
102 Needham.	115 Provincetown.
353 New Ashford.	20 Quincy.
6 New Bedford.	

116 Randolph.
203 Raynham.
86 Reading.
184 Rehoboth.
35 Revere.
298 Richmond.
256 Rochester.
77 Rockland.
118 Rockport.
320 Rowe.
231 Rowley.
286 Royalston.
269 Russell.
199 Rutland.

15 Salem.
211 Salisbury.
306 Sandisfield.
208 Sandwich.
69 Saugus.
313 Savoy.
152 Scituate.
158 Seekonk.
161 Sharon.
195 Sheffield.
218 Shelburne.
224 Sherborn.
173 Shirley.
190 Shrewsbury.
344 Shutesbury.
144 Somerset.
10 Somerville.
280 Southampton.
198 Southborough.
47 Southbridge.
107 South Hadley.
265 Southwick.
80 Spencer.
8 Springfield.
232 Sterling.
191 Stockbridge.
76 Stoneham.
83 Stoughton.
255 Stow.
189 Sturbridge.
253 Sudbury.

262 Sunderland.
135 Sutton.
84 Swampscott.
187 Swansea.

18 Taunton.
123 Templeton.
124 Tewksbury.
244 Tisbury.
348 Tolland.
248 Topsfield.
196 Townsend.
297 Truro.
283 Tyngsborough.
332 Tyringham.

180 Upton.
113 Uxbridge.

51 Wakefield.
336 Wales.
108 Walpole.
23 Waltham.
63 Ware.
121 Wareham.
119 Warren.
316 Warwick.
341 Washington.
46 Watertown.
166 Wayland.
49 Webster.
96 Wellesley.
264 Wellfleet.
314 Wendell.
266 Wenham.
95 Westborough.
237 West Boylston.
164 West Bridgewater.
235 West Brookfield.
38 Westfield.
142 Westford.
325 Westhampton.
233 Westminster.
221 West Newbury.
178 Weston.
141 Westport.

SCHOOL RETURNS.

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61 West Springfield.
236 West Stockbridge.
322 West Tisbury.
238 Westwood.
45 Weymouth.
282 Whately.
75 Whitman.
159 Wilbraham.
175 Williamsburg.
125 Williamstown.
193 Wilmington.

89 Winchendon.
59 Winchester.
329 Windsor.
54 Winthrop.
31 Woburn.
2 Worcester.
305 Worthington.
200 Wrentham.

225 Yarmouth.

GROUP I. CITIES. — 1912-13.

	CITIES.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in cities between 5 and 15 years of age.	Number of persons in cities between 7 and 14 years of age.
1	Boston, . . .	686,092 ¹	\$1,481,822,917	2,175	125,178	86,446
2	Worcester, . . .	145,986	153,058,968	512	23,232	16,657
3	Fall River, . . .	119,295	97,886,062	346	21,390	16,942
4	Lowell, . . .	106,294	84,694,648	284	14,750	10,874
5	Cambridge, . . .	104,839	115,947,300	324	17,071	11,943
6	New Bedford, . . .	96,652	101,562,334	304	16,905	12,512
7	Lynn, . . .	89,336	81,529,354	260	13,273	9,377
8	Springfield, . . .	88,926	149,530,350	352	14,637	10,251
9	Lawrence, . . .	85,892	75,449,814	212	13,954	10,121
10	Somerville, . . .	77,236	69,632,540	246	12,470	9,835
11	Holyoke, . . .	57,730	57,530,906	181	10,842	8,967
12	Brockton, . . .	56,878	49,572,372	231	8,408	6,219
13	Malden, . . .	44,404	40,381,696	152	7,936	5,629
14	Haverhill, . . .	44,115	36,506,470	160	7,907	5,929
15	Salem, . . .	43,697	36,641,100	123	7,535	5,378
16	Newton, . . .	39,806	79,363,445	152	7,026	5,021
17	Fitchburg, . . .	37,826	33,232,619	106	7,071	5,028
18	Taunton, . . .	34,259	24,035,979	124	5,410	4,225
19	Everett, . . .	33,484	29,687,800	141	6,274	4,456
20	Quincy, . . .	32,642	35,401,020	127	8,648	6,990
21	Chelsea, . . .	32,452	28,100,160	141	6,962	5,023
22	Pittsfield, . . .	32,121	33,983,555	140	5,809	4,139
23	Waltham, . . .	27,834	29,050,788	71	4,181	2,873
24	Chicopee, . . .	25,401	15,230,480	100	4,667	3,568
25	Gloucester, . . .	24,398	24,839,057	113	4,426	3,228
26	Medford, . . .	23,150	26,934,750	100	4,177	3,088
27	North Adams, . . .	22,019	16,083,088	79	4,504	3,176
28	Northampton, . . .	19,431	16,310,765	76	3,193	2,284
29	Beverly, . . .	18,650	39,005,340	89	3,387	2,400
30	Melrose, . . .	15,715	17,422,800	53	2,876	2,144
31	Woburn, . . .	15,308	11,650,266	60	3,248	2,555
32	Newburyport, . . .	14,949	12,835,482	44	2,174	1,693
33	Marlborough, . . .	14,579	10,696,549	44	2,625	1,846
	Totals, . . .	2,311,896	\$3,115,610,774	7,622	402,146	290,817

¹ Includes Hyde Park; town annexed to Boston Jan. 1, 1912.

SCHOOL RETURNS.

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GROUP I. CITIES. — 1912-13.

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 5 years of age.	Number of different pupils within the year over 15 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
115,506	2,000	13,267	64,163	103,078	-	94,530	92	6,833
24,031	5	2,388	15,888	21,204	-	19,455	92	1,102
16,603	221	1,143	11,537	14,692	-	13,569	92	420
12,988	604	1,240	8,240	11,188	-	10,154	91	509
16,672	734	1,631	10,551	15,258	-	14,105	93	788
13,718	36	919	10,000	11,873	-	11,210	94	392
12,248	-	1,436	8,668	11,454	-	10,722	94	540
17,492	1,323	2,136	9,634	14,564	-	13,548	93	757
10,785	5	678	7,280	8,707	-	8,181	94	438
12,855	7	1,762	8,220	11,866	-	11,173	94	691
7,359	391	703	4,594	6,592	-	6,176	94	348
9,780	-	1,351	6,219	9,497	-	9,065	94	529
7,450	-	1,135	4,844	6,688	-	6,211	93	319
7,132	142	805	4,640	6,369	-	5,871	94	305
5,436	203	610	3,057	4,953	-	4,697	94	284
7,369	178	1,201	5,574	6,850	-	6,325	92	455
4,635	30	656	2,908	4,246	-	3,968	93	328
5,014	-	454	3,388	4,654	-	4,464	96	182
6,719	-	879	4,573	6,368	-	6,047	95	396
6,383	-	592	4,942	5,910	-	5,509	93	472
6,760	-	552	4,778	6,321	-	5,780	91	382
6,740	148	627	3,489	5,630	-	5,222	93	292
3,298	108	487	1,831	3,016	-	2,818	93	163
3,921	119	281	2,596	3,514	-	3,241	92	109
4,789	66	744	2,950	4,501	-	4,380	97	256
4,878	-	741	3,066	4,573	-	4,285	94	290
3,476	191	366	2,150	3,072	-	2,793	91	128
2,854	67	285	1,853	2,659	-	2,491	94	105
3,916	28	525	2,353	3,718	-	3,485	94	271
2,813	-	580	1,651	2,649	-	2,505	95	214
2,940	24	405	1,810	2,749	-	2,590	94	181
2,055	-	397	1,172	1,923	-	1,810	94	122
2,089	-	280	1,279	1,889	-	1,773	94	200
370,704	6,630	41,256	229,898	332,214	-	308,153	93	18,801

BOARD OF EDUCATION.

GROUP I. CITIES. — 1912-13 — *Con.*

	CITIES.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
1	Boston,	445	2,608	162	315	2,157	9-5	
2	Worcester,	87	654	17	110	560	10	
3	Fall River,	32	501	14	30	108	9-12	
4	Lowell,	36	344	17	25	125	9-6	
5	Cambridge,	57	416	31	66	259	9-11	
6	New Bedford,	25	382	12	16	280	9-12	
7	Lynn,	27	304	10	38	147	9-15	
8	Springfield,	61	471	38	75	294	9-5	
9	Lawrence,	20	285	6	28	147	9-6	
10	Somerville,	40	309	12	47	142	9-8	
11	Holyoke,	23	228	11	35	180	9-14	
12	Brockton,	25	274	3	37	185	9-17	
13	Malden,	20	185	8	25	110	9-3	
14	Haverhill,	16	207	-	28	91	9-7	
15	Salem,	16	143	27	21	104	9-7	
16	Newton,	39	228	10	48	170	9-6	
17	Fitchburg,	20	120	2	24	48	9-7	
18	Taunton,	14	152	1	13	89	9-6	
19	Everett,	15	190	1	17	88	9-7	
20	Quincy,	18	159	3	20	94	9-3	
21	Chelsea,	9	167	4	16	82	9	
22	Pittsfield,	17	187	3	29	66	9-11	
23	Waltham,	13	95	5	15	66	9-8	
24	Chicopee,	5	119	-	10	88	9-14	
25	Gloucester,	8	132	1	13	23	9-12	
26	Medford,	19	121	5	20	54	9-8	
27	North Adams,	13	105	2	15	57	9-10	
28	Northampton,	7	91	9	12	43	9-11	
29	Beverly,	8	123	1	21	80	9-10	
30	Melrose,	11	78	6	27	37	9-3	
31	Woburn,	8	66	2	8	23	9-3	
32	Newburyport,	7	56	-	16	3	9-7	
33	Marlborough,	7	62	1	6	21	9-5	
	Totals,	1,168	9,562	424	1,226	6,021	9-8	

SCHOOL RETURNS.

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GROUP I. CITIES. — 1912-13 — *Con.*

HIGH SCHOOLS.

Number of high schools.	Length of high school year.	Number of teachers.	NUMBER OF PUPILS.		NUMBER OF PUPILS ADMITTED TO THE FRESHMAN CLASS.		NUMBER OF GRADUATES.	
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
16	9-5	508	7,080	7,918	2,638	2,954	847	1,059
4	10	126	1,547	1,783	517	623	145	177
1	9-14	37	471	568	196	170	68	108
1	9-10	41	596	704	206	224	97	144
3	9-11	91	1,232	1,188	406	308	106	147
1	9-14	30	378	457	163	190	30	55
2	9-15	53	648	740	251	242	92	124
3	9-9	98	1,064	1,185	352	388	111	162
1	10	32	489	417	213	171	71	63
1	9	69	865	1,002	294	381	124	172
1	9-14	33	399	453	178	189	49	69
1	9-17	54	708	674	324	273	71	99
1	9-5	40	514	610	186	157	78	45
1	9-7	31	378	410	135	129	59	66
1	9-1	25	340	379	149	138	44	61
2	9-7	53	723	838	211	233	108	142
1	9-7	34	411	486	158	158	50	83
1	9-18	17	202	243	68	74	25	41
1	9-9	31	365	529	156	212	44	74
1	9-10	30	449	429	196	155	51	64
1	9-3	22	251	280	107	97	27	57
2	9-11	32	833	419	151	188	28	42
1	9-7	20	255	322	100	124	29	46
1	9-14	14	131	151	48	52	20	19
1	9-12	19	222	315	73	126	31	37
1	9-4	27	375	461	145	180	46	62
1	9-15	19	202	278	74	94	21	45
1	9-14	14	116	193	44	66	12	35
1	9-11	27	351	415	117	104	29	40
1	9-3	27	370	432	140	155	40	44
1	9-9	12	204	219	73	61	29	38
1	9-11	16	211	246	67	65	38	54
1	9-12	14	221	238	59	58	19	16
58	9-10	1,696	22,101	24,982	8,195	8,739	2,639	3,480

BOARD OF EDUCATION.

GROUP I. CITIES. — 1912-13 — *Con.*

	CITIES.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
1	Boston,	103,078	\$65,254 24 ¹	\$0 62 ¹	\$99,342 70	\$0 95
2	Worcester,	21,204	8,118 60	38	2,682 51	13
3	Fall River,	14,692	3,185 00	21	1,330 26	09
4	Lowell,	11,188	—	—	518 64	05
5	Cambridge,	15,258	7,643 69	50	3,343 98	22
6	New Bedford,	11,873	4,675 87	39	801 78	07
7	Lynn,	11,454	5,942 55	52	3,188 33	28
8	Springfield,	14,564	4,610 09	32	650 00	04
9	Lawrence,	8,707	—	—	1,857 35	21
10	Somerville,	11,856	2,715 68	23	739 92	06
11	Holyoke,	6,592	1,937 48	29	3,316 77	50
12	Brockton,	9,497	—	—	—	—
13	Malden,	6,688	2,357 50	35	801 44	12
14	Haverhill,	6,369	—	—	—	—
15	Salem,	4,953	800 00	16	1,757 12	35
16	Newton,	6,850	2,770 00	40	2,137 27	31
17	Fitchburg,	4,246	825 28	19	669 40	16
18	Taunton,	4,654	992 06	21	647 02	14
19	Everett,	6,368	—	—	2,826 51	44
20	Quincy,	5,910	—	—	1,445 62	24
21	Chelsea,	6,321	600 00	09	—	—
22	Pittsfield,	5,630	779 00	14	193 63	03
23	Waltham,	3,016	649 98	21	393 11	13
24	Chicopee,	3,514	610 00	17	392 36	11
25	Gloucester,	4,501	—	—	1,229 00	27
26	Medford,	4,573	1,655 00	36	471 75	10
27	North Adams,	3,072	450 00	15	411 60	13
28	Northampton,	2,659	—	—	1,211 35	46
29	Beverly,	3,718	1,534 83	41	2,865 47	77
30	Melrose,	2,649	700 00	26	521 79	20
31	Woburn,	2,749	455 79	16	760 44	28
32	Newburyport,	1,922	—	—	—	—
33	Marlborough,	1,889	—	—	—	—
	Totals,	332,214	\$119,262 64	\$0 36	\$136,507 12	\$0 41

¹ Salaries of schoolhouse commissioners.

SCHOOL RETURNS.

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GROUP I. CITIES. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$9,666 66	\$0 09	\$51,654 73	\$0 50	\$91,534 09	\$0 89	\$9,781 83	\$0 09
16,399 68	77	935 00	04	10,000 00	47	15 00	-
8,956 45	61	1,164 33	08	6,012 50	41	55 05	-
10,140 55	91	834 60	07	5,915 35	53	-	-
13,813 00	90	515 42	03	4,709 00	31	20 27	-
8,599 14	72	862 47	07	18,940 00	1 17	49 00	-
6,713 78	59	406 07	04	4,941 88	43	-	-
10,380 00	71	4,654 59	32	9,538 50	65	-	-
3,500 00	40	3,600 00	41	14,823 75	1 70	-	-
4,804 33	40	1,352 37	11	5,181 25	44	-	-
6,433 73	98	72 94	01	6,320 00	96	-	-
3,250 00	34	3,793 00	40	4,800 00	51	-	-
3,799 97	57	760 29	11	4,000 00	60	-	-
4,749 96	75	898 01	14	5,900 00	93	-	-
4,320 00	87	84 98	02	2,400 00	48	-	-
6,200 00	91	416 45	06	11,020 00	1 61	-	-
4,420 17	1 04	87 39	02	3,255 83	77	-	-
3,233 30	69	511 87	11	2,450 00	53	-	-
2,600 00	41	1,048 75	16	4,150 00	65	-	-
2,700 00	46	1,464 23	25	3,935 00	67	-	-
2,700 00	43	300 00	05	4,405 00	70	-	-
2,800 00	50	1,500 55	27	4,757 80	85	225 00	04
3,100 00	1 03	113 22	04	3,531 50	1 17	62 90	02
2,912 50	83	965 22	27	2,010 00	57	-	-
2,300 00	51	1,078 37	24	-	-	-	-
3,950 00	86	236 64	05	4,747 50	1 04	-	-
2,083 20	68	2,234 37	73	-	-	-	-
2,499 96	94	438 04	16	3,100 00	1 17	-	-
3,713 19	1 00	132 14	04	7,978 75	2 15	159 42	04
2,700 00	1 02	690 81	26	3,471 67	1 31	-	-
2,600 00	95	33 22	01	-	-	-	-
1,800 00	94	708 00	36	-	-	-	-
1,741 63	92	800 00	42	800 00	42	430 76	23
\$169,581 20	\$0 51	\$84,348 07	\$0 25	\$249,629 37	\$0 75	\$10,799 23	\$0 03

GROUP I. CITIES. — 1912-13 — *Con.*

	CITIES.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principal's salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
1	Boston,	\$287,778 48	\$2 79	\$3,511,982 10	\$34 07
2	Worcester,	80,724 00	3 81	573,157 70	27 03
3	Fall River,	91,785 00	6 25	291,953 94	19 87
4	Lowell,	28,550 63	2 55	253,161 15	22 63
5	Cambridge,	42,653 01	2 80	386,458 99	23 52
6	New Bedford,	42,951 50	3 62	265,758 29	22 38
7	Lynn,	25,477 50	2 22	247,147 13	21 57
8	Springfield,	35,416 13	2 43	451,597 15	31 01
9	Lawrence,	33,988 17	3 91	203,912 58	23 42
10	Somerville,	39,243 70	3 31	268,799 50	22 75
11	Holyoke,	25,388 94	3 85	179,849 93	27 29
12	Brockton,	35,523 50	3 74	202,533 73	21 32
13	Malden,	22,786 77	3 41	148,990 10	22 28
14	Haverhill,	14,595 30	2 29	147,065 62	23 09
15	Salem,	24,425 18	4 93	96,000 29	19 38
16	Newton,	25,364 00	3 71	209,214 36	30 54
17	Fitchburg,	11,993 50	2 82	108,335 24	25 51
18	Taunton,	24,543 28	5 27	86,410 55	18 57
19	Everett,	18,515 00	2 90	129,593 79	20 35
20	Quincy,	15,486 00	2 62	118,778 21	20 10
21	Chelsea,	12,875 00	2 04	122,091 26	19 31
22	Pittsfield,	16,118 00	2 86	120,455 50	21 39
23	Waltham,	6,432 00	2 13	80,915 12	26 82
24	Chicopee,	10,028 41	2 85	64,734 94	18 42
25	Gloucester,	18,328 00	4 07	68,977 50	15 32
26	Medford,	10,416 00	2 28	97,910 28	21 41
27	North Adams,	8,262 00	2 69	66,918 78	21 78
28	Northampton,	5,820 00	2 19	52,387 10	19 70
29	Beverly,	9,757 00	2 63	88,025 11	23 67
30	Melrose,	9,800 00	3 70	56,594 92	21 36
31	Woburn,	13,088 62	4 76	40,912 10	14 88
32	Newburyport,	10,068 67	5 24	33,997 81	17 69
33	Marlborough,	5,500 00	2 91	39,271 51	20 79
	Totals,	\$1,063,683 27	\$3 29	\$8,813,892 28	\$26 54

SCHOOL RETURNS.

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GROUP I. CITIES. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$81,833 01	\$0 79	\$129,565 24	\$1 24	\$298,795 49	\$2 89	\$125,429 96	\$1 22
25,174 68	1 19	22,509 05	1 06	63,157 50	2 98	35,526 67	1 68
11,979 23	83	14,267 36	97	53,992 16	3 68	18,789 40	1 28
7,415 22	66	5,712 98	51	55,059 05	4 92	26,985 83	2 41
8,524 27	56	13,818 37	90	48,205 47	3 16	17,792 14	1 17
9,837 63	83	12,618 51	1 06	35,238 50	2 97	19,506 25	1 64
12,881 13	1 12	12,193 85	1 06	31,947 95	2 79	19,733 78	1 72
14,577 77	1 00	41,884 11	2 87	47,509 59	3 26	30,845 12	2 12
4,094 52	47	6,582 23	76	22,083 12	2 53	14,493 98	1 66
9,318 60	79	13,293 05	1 12	28,599 09	2 41	16,055 27	1 35
3,362 67	51	10,389 57	1 58	22,293 00	3 38	14,565 77	2 21
18,778 56	1 98	-	-	21,545 48	2 27	21,340 94	2 25
6,540 30	98	7,881 95	1 18	15,813 19	2 35	17,384 81	2 60
6,747 87	1 06	3,930 71	62	18,164 24	2 85	12,280 16	1 93
5,526 27	1 12	3,089 20	62	16,359 48	3 30	10,017 42	2 02
5,114 94	75	8,437 96	1 23	19,542 55	2 85	13,259 29	1 94
4,142 88	98	6,045 64	1 42	10,115 06	2 38	12,100 75	2 85
5,791 98	1 24	3,127 79	67	11,220 43	2 41	10,484 16	2 25
6,154 50	97	8,326 03	1 31	16,105 53	2 53	10,556 91	1 66
5,552 67	94	6,449 62	1 09	11,413 40	1 93	8,930 50	1 51
7,677 54	1 21	4,348 64	69	18,764 72	2 97	7,187 84	1 14
6,198 25	1 10	6,681 70	1 19	13,900 32	2 47	17,255 81	3 06
2,598 15	86	4,729 87	1 57	8,173 09	2 71	7,335 66	2 43
1,894 07	53	3,198 64	91	8,493 42	2 42	11,051 03	3 15
2,558 70	57	4,712 81	1 05	12,514 00	2 78	8,186 81	1 82
4,576 62	1 00	4,387 14	96	10,634 00	2 33	8,834 69	1 93
2,506 37	81	2,591 12	84	7,477 49	2 43	9,713 52	3 16
2,202 83	83	1,746 22	65	7,855 34	2 95	6,750 83	2 54
8,476 08	2 28	5,415 05	1 46	9,353 71	2 52	6,656 30	1 79
3,911 62	1 48	2,994 17	1 13	8,103 26	3 06	6,219 12	2 35
967 58	35	1,627 16	59	5,591 30	2 03	7,589 91	2 76
-	-	5,011 23	2 61	4,057 28	2 11	3,556 11	1 85
2,701 83	1 43	884 60	47	3,991 88	2 11	3,843 89	2 03
\$299,608 34	\$0 90	\$378,451 57	\$1 14	\$966,070 09	\$2 94	\$560,260 63	\$1 72

BOARD OF EDUCATION.

GROUP I. CITIES. — 1912-13 — *Con.*

		EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
	CITIES.	Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
1	Boston,	\$56,714 77	\$0 55	\$271,825 52	\$2 64	-	-
2	Worcester,	13,505 67	64	25,347 98	1 20	\$896 08	\$0 04
3	Fall River,	1,680 95	11	27,849 64	1 90	-	-
4	Lowell,	3,078 61	28	2,514 08	22	-	-
5	Cambridge,	5,810 00	58	16,507 18	1 08	-	-
6	New Bedford,	7,613 08	64	15,834 37	1 33	-	-
7	Lynn,	1,923 03	17	10,596 60	93	-	-
8	Springfield,	16,513 94	1 13	24,921 57	1 71	-	-
9	Lawrence,	4,149 35	48	14,274 86	1 64	-	-
10	Somerville,	10,721 92	96	19,341 35	1 63	-	-
11	Holyoke,	6,901 81	1 05	10,970 26	1 66	-	-
12	Brockton,	6,352 94	67	15,222 06	1 60	-	-
13	Malden,	2,539 64	38	13,631 00	2 04	-	-
14	Haverhill,	-	-	7,188 28	1 13	-	-
15	Salem,	1,467 35	30	6,842 13	1 38	-	-
16	Newton,	2,303 75	34	22,037 14	3 22	-	-
17	Fitchburg,	1,240 36	29	344 25	08	138 16	03
18	Taunton,	1,071 19	23	7,456 58	1 60	-	-
19	Everett,	3,723 84	58	11,567 97	1 81	-	-
20	Quincy,	1,384 64	23	5,940 61	1 01	-	-
21	Chelsea,	2,856 65	40	8,092 58	1 28	-	-
22	Pittsfield,	587 75	10	-	-	-	-
23	Waltham,	3,403 98	1 13	6,492 23	2 15	-	-
24	Chicopee,	2,866 58	82	6,561 30	1 87	-	-
25	Gloucester,	3,430 37	76	9,811 21	2 18	72 00	-
26	Medford,	2,248 95	49	5,178 36	1 13	-	-
27	North Adams,	1,145 19	37	3,874 35	1 26	-	-
28	Northampton,	479 33	18	2,649 05	1 00	-	-
29	Beverly,	3,211 12	86	7,798 78	2 10	-	-
30	Melrose,	1,069 01	40	4,213 50	1 59	-	-
31	Woburn,	607 99	22	2,604 18	95	-	-
32	Newburyport,	-	-	-	-	-	-
33	Marlborough,	1,382 95	73	3,008 63	1 60	-	-
	Totals,	\$171,986 71	\$0 52	\$590,497 60	\$1 78	\$1,106 24	-

SCHOOL RETURNS.

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GROUP I. CITIES. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditure for the support of public schools, being the total of items in the eighteen preceding columns.	Cost per pupil in average membership.
\$48,874 53	\$0 47	\$432 60	-	\$174,602 43	\$1 69	\$5,315,068 38	\$51 56
4,068 74	19	597 00	\$0 03	4,534 99	22	887,350 85	41 85
1,633 00	11	480 00	03	1,812 00	12	536,926 27	36 55
3,468 55	31	120 25	01	6,671 73	60	410,147 22	36 66
-	-	373 00	02	4,039 58	26	574,227 37	37 64
2,396 00	20	940 00	08	3,599 68	30	445,222 07	37 50
2,200 00	19	425 00	04	2,934 99	26	388,653 57	33 93
4,575 84	31	1,295 00	09	7,594 74	52	706,564 14	48 52
2,200 00	25	-	-	4,516 11	52	334,076 02	38 37
1,500 00	13	-	-	1,226 86	10	422,892 89	35 67
1,215 50	18	1,071 10	16	1,982 67	30	296,072 14	44 91
1,520 00	16	-	-	-	-	334,660 21	35 24
761 52	11	-	-	418 97	06	248,467 45	37 15
-	-	3,267 50	51	9,682 81	1 52	234,470 46	36 81
650 00	13	725 00	15	744 48	15	175,208 90	35 37
3,556 90	52	2,295 00	34	857 24	13	334,526 85	48 84
2,078 09	49	2,162 25	51	286 66	07	168,240 91	39 62
800 00	17	1,991 35	43	1,373 84	30	162,105 38	34 83
1,400 02	21	-	-	1,451 06	23	218,019 91	34 23
600 00	10	1,295 00	22	809 71	14	186,185 21	31 50
1,500 00	24	-	-	-	-	193,399 23	30 60
1,553 50	28	2,055 00	37	1,804 85	32	196,866 66	34 97
1,301 25	43	1,565 00	52	1,641 59	54	132,438 65	43 91
1,212 15	34	3,502 10	1 00	878 66	25	121,301 38	34 52
1,093 00	24	3,734 00	83	-	-	138,025 77	30 66
200 00	04	-	-	777 79	17	156,224 72	34 16
1,000 00	33	1,167 50	38	1,962 75	64	111,798 24	36 39
853 62	32	1,106 21	42	1,657 66	62	90,757 54	34 13
400 00	11	3,624 74	97	810 25	22	159,911 94	43 01
-	-	620 75	23	1,562 11	59	103,172 73	38 95
205 00	07	-	-	482 17	17	77,525 46	28 20
-	-	284 00	14	-	-	59,483 10	30 95
309 25	16	2,673 23	1 42	-	-	67,340 16	35 65
\$93,126 46	\$0 28	\$37,802 58	\$0 11	\$240,718 38	\$0 72	\$13,987,331 78	\$42 10

BOARD OF EDUCATION.

GROUP I. CITIES. — 1912-13 — *Con.*

	CITIES.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
1	Boston,	\$840,044 35	\$80,440 95	\$920,485 30
2	Worcester,	53,926 99	4,565 57	58,492 56
3	Fall River,	129,943 82	—	129,943 82
4	Lowell,	—	—	—
5	Cambridge,	34,867 35	4,784 33	39,651 68
6	New Bedford,	196,900 76	60,949 48	257,850 24
7	Lynn,	60,276 90	5,261 58	65,538 48
8	Springfield,	207,606 62	11,483 72	219,090 34
9	Lawrence,	23,270 28	—	23,270 28
10	Somerville,	33,646 72	1,219 55	34,866 27
11	Holyoke,	10,807 68	5,260 00	16,067 68
12	Brockton,	53,538 56	3,431 05	56,969 61
13	Malden,	—	—	—
14	Haverhill,	1,503 39	250 00	1,753 39
15	Salem,	26,323 36	341 60	26,664 96
16	Newton,	793 12	31,599 10	32,392 22
17	Fitchburg,	12,744 61	772 82	13,517 43
18	Taunton,	4,145 46	333 10	4,478 56
19	Everett,	23,228 23	4,196 82	27,425 05
20	Quincy,	60,811 21	4,090 13	64,901 34
21	Chelsea,	17,323 18	6,109 27	23,432 45
22	Pittsfield,	—	—	—
23	Waltham,	482 50	1,707 61	2,190 11
24	Chicopee,	52,475 53	1,942 16	54,417 69
25	Gloucester,	4,500 00	787 34	5,287 34
26	Medford,	—	—	—
27	North Adams,	12,252 00	160 00	12,412 00
28	Northampton,	19,568 75	—	19,568 75
29	Beverly,	110,577 51	11,636 59	122,214 10
30	Melrose,	—	—	—
31	Woburn,	721 23	165 48	886 71
32	Newburyport,	8,815 98	—	8,815 98
33	Marlborough,	4,979 00	997 25	5,976 25
	Totals,	\$2,006,075 09	\$242,485 50	\$2,248,560 59

SCHOOL RETURNS.

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GROUP I. CITIES. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING CITY FISCAL YEAR.		Expenditures for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 25, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$5,113,411 34	\$10,981 87	\$1,110,470 80	-	-	-
832,416 27	5,438 44	207,582 96	\$1,625 00	-	-
499,759 59	9,987 68	59,144 08	2,500 00	-	-
394,558 22	-	56,508 58	-	-	-
547,441 69	24,735 85	131,049 97	-	-	-
424,103 46	1,768 37	55,611 79	-	-	-
386,201 21	1,258 98	87,847 05	-	-	-
676,143 40	-	173,485 55	627 11	-	-
309,713 24	-	42,909 73	-	-	-
416,682 39	625 63	94,225 97	-	-	-
290,571 23	894 50	57,003 13	1,421 58	-	-
284,282 42	4,371 92	74,257 55	-	-	-
241,841 27	1,304 40	60,176 38	711 67	-	-
221,772 16	2,477 96	50,946 99	-	-	-
166,709 03 ¹	-	41,977 00	-	-	-
341,625 37	3,303 50	100,969 64	250 00	-	-
153,212 79	875 50	46,996 46	-	-	-
151,095 34	3,083 19	23,925 89	-	-	-
208,984 48	446 21	43,647 77	-	-	-
185,839 14	346 07	37,909 76	-	-	-
174,496 84	-	12,966 03	-	-	-
178,152 16	1,898 00	39,656 84	-	-	-
112,123 20	72 50	38,044 21	-	-	-
109,452 89	143 89	21,087 47	-	-	-
138,480 50	1,050 50	26,129 46	-	-	-
150,452 46	575 00	35,328 00	-	-	-
107,305 70	1,659 68	23,604 04	-	-	-
89,449 14	1,883 04	17,160 73	-	-	-
157,093 73	-	41,961 53	-	-	-
100,848 23	-	36,621 68	-	-	-
72,159 47	1,561 59	16,503 76	-	-	-
61,642 17	2,542 86	13,298 15	1,200 00	-	-
65,882 77	1,253 03	18,637 59	475 00	-	-
\$13,363,903 30	\$84,540 16	\$2,897,646 54	\$8,810 36	-	-

¹ For eleven months only, due to change in city fiscal year.

BOARD OF EDUCATION.

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13.

	TOWNS.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in towns between 6 and 15 years of age.	Number of persons in towns between 7 and 14 years of age.
34	Brookline, . . .	27,792	\$111,053,000	101	3,878	2,748
35	Revere, . . .	18,219	19,800,260	99	4,208	2,864
36	Leominster, . . .	17,580	13,182,680	55	3,301	2,481
37	Attleborough, . . .	16,215	19,538,265	62	2,794	2,278
38	Westfield, . . .	16,044	10,822,614	60.	2,959	2,005
39	Peabody, . . .	15,721	12,572,650	58	2,665	2,138
40	Gardner, . . .	14,699	10,014,080	43	2,496	1,955
41	Clinton, . . .	13,075	9,081,084	46	2,347	1,766
42	Milford, . . .	13,055	9,886,558	49	2,529	1,786
43	Adams, . . .	13,026	6,447,584	41	2,480	1,763
44	Framingham, . . .	12,948	14,374,990	56	2,107	1,508
45	Weymouth, . . .	12,895	9,957,156	56	2,099	1,567
46	Watertown, . . .	12,875	16,055,265	46	2,216	1,569
47	Southbridge, . . .	12,592	7,103,033	25	2,290	1,662
48	Plymouth, . . .	12,141	12,217,082	55	2,194	1,515
49	Webster, . . .	11,509	8,705,890	23	2,422	1,901
50	Methuen, . . .	11,448	7,986,595	54	2,654	1,842
51	Wakefield, . . .	11,404	10,930,658	52	1,990	1,383
52	Arlington, . . .	11,187	13,980,549	53	2,277	1,705
53	Greenfield, . . .	10,427	10,810,835	51	1,763	1,230
54	Winthrop, . . .	10,132	14,761,520	39	1,828	1,434
55	Amesbury, . . .	9,894	6,537,580	20	1,442	1,007
56	Natick, . . .	9,866	8,697,675	37	1,608	1,136
57	North Attleborough, . . .	9,562	9,163,844	39	1,515	1,137
58	Danvers, . . .	9,407	6,981,550	38	1,436	1,019
59	Winchester, . . .	9,309	15,166,425	39	1,753	1,084
60	Dedham, . . .	9,284	14,165,685	48	1,798	1,262
61	West Springfield, . . .	9,224	8,289,638	52	1,841	1,323
62	Northbridge, . . .	8,807	5,215,755	40	1,702	1,409
63	Ware, . . .	8,774	4,883,490	30	1,685	968
64	Palmer, . . .	8,610	4,835,190	36	1,533	1,275
65	Athol, . . .	8,536	5,542,480	35	1,557	1,112
66	Easthampton, . . .	8,524	6,424,918	27	1,411	1,262
67	Middleborough, . . .	8,214	4,849,792	34	1,356	950
68	Braintree, . . .	8,066	7,908,477	44	1,618	1,148
69	Saugus, . . .	8,047	6,343,006	43	1,703	1,223
70	Norwood, . . .	8,014	14,644,020	41	1,577	1,266
71	Milton, . . .	7,924	27,359,789	39	1,260	1,046
72	Bridgewater, . . .	7,688	3,618,159	29	829	646
73	Marblehead, . . .	7,338	10,198,916	28	1,155	864
74	Andover, . . .	7,301	7,207,765	33	1,288	901
75	Whitman, . . .	7,292	5,538,426	29	1,200	829
76	Stoneham, . . .	7,090	5,260,880	27	1,121	772
77	Rockland, . . .	6,928	4,827,630	26	1,097	765
78	Montague, . . .	6,866	4,455,221	33	1,180	863

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13.

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 5 years of age.	Number of different pupils within the year over 15 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
4,470	378	530	2,457	3,345	-	3,087	92	264
4,535	-	437	3,037	4,281	-	3,965	93	209
2,501	12	229	1,556	2,285	-	2,116	93	133
2,618	25	229	1,849	2,407	-	2,295	95	121
2,831	103	303	1,836	2,641	-	2,447	92	119
2,434	7	304	1,597	2,233	-	2,117	94	122
1,953	-	269	1,376	1,871	-	1,756	94	115
1,864	8	242	1,174	1,694	-	1,624	96	80
2,188	-	220	1,548	2,012	-	1,932	97	61
2,097	17	172	1,438	1,729	-	1,667	96	63
2,476	9	292	1,610	2,337	-	2,153	92	132
2,432	30	251	1,567	2,273	-	2,118	93	135
1,963	-	227	1,278	1,824	-	1,731	93	106
1,011	4	103	636	843	-	783	93	33
2,283	6	202	1,604	2,161	-	2,050	95	85
969	2	96	647	856	-	787	92	47
2,313	51	180	1,585	2,143	-	2,001	93	91
2,502	-	361	1,486	2,171	-	2,051	94	131
2,594	-	536	1,520	2,333	-	2,199	94	163
2,066	62	249	1,195	1,857	-	1,734	93	111
2,182	-	264	1,404	1,996	-	1,853	93	165
848	-	143	577	781	-	735	94	47
1,912	-	315	1,142	1,810	-	1,729	96	124
1,657	5	127	1,137	1,480	-	1,401	95	69
1,662	-	226	965	1,561	-	1,491	96	104
1,860	34	268	1,109	1,725	-	1,619	94	98
1,991	20	256	1,226	1,884	-	1,742	92	124
2,016	85	236	1,371	1,996	-	1,851	93	94
1,785	-	112	1,407	1,617	-	1,550	96	49
1,292	4	130	862	1,175	-	1,114	95	46
1,639	18	150	1,059	1,434	-	1,373	96	63
1,536	-	138	1,082	1,396	-	1,302	93	74
1,238	1	131	824	1,130	-	1,044	92	67
1,625	-	180	1,018	1,399	-	1,313	94	60
1,672	32	117	1,070	1,560	-	1,451	93	81
1,833	-	165	1,306	1,753	-	1,642	94	124
1,766	-	170	1,203	1,707	-	1,618	95	76
1,490	25	250	779	1,353	-	1,275	94	105
1,052	44	108	566	952	-	890	94	49
1,317	29	157	805	1,221	-	1,127	92	74
1,196	2	25	929	1,185	-	1,112	94	104
1,387	1	180	864	1,299	-	1,259	96	68
1,115	-	241	755	1,062	-	957	92	94
1,190	3	159	740	1,140	-	1,094	96	64
1,199	13	143	780	1,109	-	1,031	94	88

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
34	Brookline,	16	148	3	22	62	9-11	
35	Revere,	7	115	6	10	52	9-7	
36	Leominster,	10	71	4	11	47	9-2	
37	Attleborough,	7	74	3	10	51	9-8	
38	Westfield,	8	78	4	14	62	9-12	
39	Peabody,	5	71	—	8	47	9-11	
40	Gardner,	2	56	—	10	37	9	
41	Clinton,	4	51	—	5	10	9-5	
42	Milford,	2	59	—	5	32	9-6	
43	Adams,	5	50	1	7	31	9-8	
44	Framingham,	8	65	2	7	50	9-1	
45	Weymouth,	10	60	—	9	35	9-13	
46	Watertown,	7	61	14	12	31	9-1	
47	Southbridge,	2	34	1	6	9	9-17	
48	Plymouth,	3	63	—	7	26	9-14	
49	Webster,	2	33	1	6	18	9-14	
50	Methuen,	4	61	1	3	43	9-8	
51	Wakefield,	9	68	4	11	36	9-6	
52	Arlington,	7	67	4	15	37	9-8	
53	Greenfield,	7	58	3	9	36	9-5	
54	Winthrop,	7	54	1	11	38	9-11	
55	Amesbury,	4	28	—	8	7	9-6	
56	Natick,	7	49	4	12	25	9-6	
57	North Attleborough,	5	45	1	8	36	9-2	
58	Danvers,	6	42	—	6	32	9-7	
59	Winchester,	6	53	2	14	14	9-9	
60	Dedham,	6	58	1	10	43	9-9	
61	West Springfield,	5	52	—	6	33	9-3	
62	Northbridge,	1	45	1	4	34	9-10	
63	Ware,	1	35	1	5	14	9-3	
64	Palmer,	3	41	—	6	29	9-5	
65	Athol,	3	38	1	6	15	9-5	
66	Easthampton,	3	32	4	7	14	9-5	
67	Middleborough,	6	38	—	6	6	9-10	
68	Braintree,	5	48	2	8	29	8-19	
69	Saugus,	2	51	—	7	22	9-8	
70	Norwood,	4	49	3	7	33	9-2	
71	Milton,	7	56	1	10	40	9-5	
72	Bridgewater,	2	33	—	6	27	9-3	
73	Marblehead,	2	39	—	3	30	9-6	
74	Andover,	3	40	2	5	17	8-17	
75	Whitman,	3	35	—	7	21	8-15	
76	Stoneham,	5	35	1	7	16	9-10	
77	Rockland,	4	31	—	6	14	9-15	
78	Montague,	4	37	—	7	31	9-4	

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER — 1912-13 — *Con.*

HIGH SCHOOLS.

Number of high schools.	Length of high school year.	Number of teachers.	NUMBER OF PUPILS.		NUMBER OF PUPILS ADMITTED TO THE FRESHMAN CLASS.		NUMBER OF GRADUATES.	
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1	9-11	29	296	299	112	106	44	41
1	9-6	15	194	216	60	81	20	30
1	9-6	15	182	207	78	92	25	28
1	9-10	11	133	169	49	54	14	28
1	9-16	16	170	199	68	75	30	37
1	9-7	16	235	224	62	50	28	24
1	9-12	12	157	200	43	46	24	26
1	9-12	10	105	140	36	55	15	28
1	9-13	9	99	123	29	37	18	23
1	9-12	8	99	106	35	44	20	15
1	9-13	11	165	190	62	81	15	27
1	9-14	11	128	136	45	57	21	24
1	9-4	12	91	128	30	45	12	20
1	9-17	6	52	53	18	18	8	8
1	9-15	9	96	139	39	55	10	27
1	9-16	8	72	90	16	20	8	7
1	9-17	7	73	107	28	45	6	14
1	9-8	14	189	215	68	70	21	44
1	9-9	17	220	267	76	95	31	37
1	9-15	9	133	139	40	58	20	17
1	9-11	13	152	194	42	59	19	34
1	9-14	9	94	128	37	45	7	25
1	9-12	12	162	210	62	62	16	36
1	9-11	8	80	95	43	32	8	20
1	9-8	9	156	105	54	66	7	15
1	9-8	14	131	181	39	56	22	39
1	9-11	10	109	174	41	61	15	25
1	9-17	9	76	145	26	35	12	25
1	10	6	81	81	24	21	14	10
1	9-10	6	85	73	31	20	12	11
1	9-12	8	65	92	14	31	8	15
1	9-15	7	90	119	37	52	14	13
1	9-15	7	60	92	34	29	3	14
1	10	8	94	106	34	34	12	13
1	9-8	9	94	97	49	43	10	13
1	9-7	6	52	95	18	40	11	12
1	9-6	8	78	85	29	21	10	15
1	9-4	13	121	153	34	51	19	21
1	9-13	7	63	66	18	20	11	15
1	9-13	7	69	120	21	41	5	22
1	9-6	6	53	67	21	30	6	16
1	9-10	8	90	152	31	40	4	25
1	9-15	8	134	143	43	39	13	19
1	9-13	10	80	129	25	30	5	37
1	9-10	8	104	114	25	26	9	16

¹ Punchard Free School.

GROUP II. TOWNS. POPULATION 5,000 OR OVER — 1912-13 — *Con.*

	TOWNS.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
34	Brookline,	3,345	-	-	-	-
35	Revere,	4,281	\$650 00	\$0 15	\$670 27	\$0 16
36	Leominster,	2,285	624 00	27	53 00	02
37	Attleborough,	2,407	900 00	37	451 56	18
38	Westfield,	2,641	-	-	450 00	17
39	Peabody,	2,233	-	-	294 00	13
40	Gardner,	1,871	-	-	566 96	30
41	Clinton,	1,694	-	-	-	-
42	Milford,	2,012	-	-	160 50	08
43	Adams,	1,729	175 00	10	261 03	15
44	Framingham,	2,337	520 00	22	314 31	13
45	Weymouth,	2,273	-	-	300 70	13
46	Watertown,	1,824	579 00	32	236 97	13
47	Southbridge,	843	-	-	61 42	07
48	Plymouth,	2,161	-	-	51 70	02
49	Webster,	856	150 00	17	420 48	49
50	Methuen,	2,143	-	-	44 80	02
51	Wakefield,	2,171	403 00	18	536 29	25
52	Arlington,	2,333	174 99	75	85 70	04
53	Greenfield,	1,857	-	-	431 66	23
54	Winthrop,	1,996	100 00	05	210 00	11
55	Amesbury,	781	-	-	397 22	51
56	Natick,	1,810	-	-	-	-
57	North Attleborough,	1,480	345 83	23	255 49	17
58	Danvers,	1,561	50 00	03	45 39	03
59	Winchester,	1,725	840 65	49	682 24	39
60	Dedham,	1,884	700 00	37	277 55	15
61	West Springfield,	1,996	518 30	26	219 61	11
62	Northbridge,	1,617	-	-	40 90	03
63	Ware,	1,175	-	-	56 00	05
64	Palmer,	1,434	443 48	31	172 56	12
65	Athol,	1,396	-	-	2 00	-
66	Easthampton,	1,130	78 50	07	277 92	25
67	Middleborough,	1,399	150 00	11	-	-
68	Braintree,	1,560	-	-	248 00	16
69	Saugus,	1,753	50 00	03	75 46	04
70	Norwood,	1,707	-	-	1,156 79	68
71	Milton,	1,353	400 86	30	315 52	23
72	Bridgewater,	952	-	-	25 00	03
73	Marblehead,	1,221	-	-	-	-
74	Andover,	1,185	391 25	33	84 13	07
75	Whitman,	1,299	50 00	04	295 74	23
76	Stoneham,	1,062	125 00	12	2 25	-
77	Rockland,	1,140	-	-	135 02	12
78	Montague,	1,109	-	-	268 25	24

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$4,249 97	\$1 27	\$6,844 43	\$2 05	\$4,384 38	\$1 31	-	-
3,183 32	74	72 86	02	3,108 32	73	\$120 00	\$0 03
2,200 00	96	861 19	38	-	-	-	-
2,887 53	1 20	232 05	10	1,848 88	77	-	-
2,600 00	99	416 08	16	3,800 00	1 44	-	-
2,073 32	93	805 08	36	2,380 00	1 05	-	-
2,118 75	1 13	146 63	08	3,500 00	1 87	-	-
2,100 00	1 24	1,613 75	95	-	-	-	-
1,836 36	91	105 00	05	-	-	-	-
2,500 00	1 45	280 33	16	-	-	-	-
2,288 21	98	332 19	14	3,566 25	1 53	-	-
2,024 98	89	52 88	02	2,230 00	98	-	-
2,374 96	1 30	46 55	03	-	-	-	-
1,150 00	1 37	83 85	10	1,200 00	1 42	-	-
1,968 34	91	396 23	18	1,660 00	76	119 00	05
1,650 00	1 93	251 99	29	1,300 00	1 52	-	-
1,800 00	84	799 00	37	3,120 00	1 46	42 00	02
1,999 96	92	120 77	06	1,566 88	72	-	-
2,600 00	1 12	299 16	13	-	-	-	-
2,550 00	1 37	336 08	18	4,700 00	2 53	112 12	06
2,500 00	1 25	160 00	08	-	-	-	-
1,526 13	1 95	211 72	27	-	-	-	-
2,000 00	1 10	505 67	28	-	-	-	-
2,074 92	1 40	244 76	17	-	-	48 00	03
2,000 00	1 28	90 35	06	2,150 00	1 38	-	-
2,945 83	1 71	226 12	13	1,807 50	1 05	12 20	01
2,200 00	1 17	175 29	09	1,153 75	61	-	-
2,128 28	1 07	133 85	07	2,412 50	1 21	-	-
2,350 00	1 45	76 91	05	1,000 00	62	-	-
2,000 00	1 70	-	-	1,100 00	94	-	-
1,741 63	1 21	135 90	09	-	-	-	-
2,000 00	1 43	-	-	1,123 50	80	54 00	04
1,263 25	1 12	93 58	08	-	-	-	-
2,200 00	1 57	-	-	1,500 00	1 07	-	-
1,900 00	1 22	240 00	15	-	-	-	-
1,948 44	1 11	136 80	08	1,390 00	79	-	-
2,100 00	1 23	74 75	04	1,865 04	1 09	4 13	-
2,725 00	2 01	228 10	15	6,100 00	4 51	-	-
1,099 92	1 16	82 65	09	-	-	-	-
1,800 00	1 47	-	-	800 00	65	-	-
2,074 21	1 75	124 87	11	1,774 51	1 50	127 00	11
1,900 00	1 46	7 63	01	1,393 59	1 08	-	-
1,320 00	1 26	97 46	09	-	-	-	-
1,504 00	1 32	78 74	07	650 00	06	-	-
1,800 00	1 62	36 80	03	1,537 00	1 39	-	-

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principals' salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
34	Brookline,	—	—	\$178,866 25	\$53 47
35	Revere,	\$8,443 38	\$1 97	73,656 75	17 22
36	Leominster,	8,519 50	3 73	44,312 55	19 39
37	Attleborough,	8,854 00	2 43	48,054 68	19 96
38	Westfield,	8,900 00	3 37	43,345 11	16 41
39	Peabody,	9,750 00	4 37	39,564 17	17 76
40	Gardner,	6,181 00	3 30	26,453 10	14 14
41	Clinton,	1,990 00	1 17	39,158 50	23 12
42	Milford,	7,953 00	3 95	30,748 13	15 28
43	Adams,	5,592 00	3 23	29,474 75	17 05
44	Framingham,	9,506 84	4 07	36,523 15	15 63
45	Weymouth,	9,240 50	4 07	30,568 52	13 45
46	Watertown,	8,409 00	4 61	43,492 94	23 84
47	Southbridge,	3,495 00	4 15	15,012 35	17 81
48	Plymouth,	5,350 00	2 48	36,452 90	16 87
49	Webster,	4,420 00	5 16	16,326 33	19 07
50	Methuen,	7,012 29	3 27	30,036 41	14 01
51	Wakefield,	6,592 13	3 04	45,124 77	20 79
52	Arlington,	8,360 00	3 58	52,120 02	22 34
53	Greenfield,	3,389 00	1 82	32,753 22	17 10
54	Winthrop,	4,850 00	2 43	43,582 50	21 83
55	Amesbury,	4,136 00	5 29	15,044 03	19 26
56	Natick,	4,078 75	2 25	35,057 69	19 36
57	North Attleborough,	6,350 00	4 29	27,794 24	18 78
58	Danvers,	4,995 00	3 20	25,338 00	16 23
59	Winchester,	3,666 67	2 12	42,000 54	24 35
60	Dedham,	6,139 50	3 26	43,004 59	22 82
61	West Springfield,	6,282 86	3 15	26,435 78	13 23
62	Northbridge,	4,580 40	2 83	21,006 75	12 93
63	Ware,	1,700 00	1 45	19,541 01	16 63
64	Palmer,	1,466 66	1 02	23,037 53	16 07
65	Athol,	4,480 00	3 21	18,375 80	13 16
66	Easthampton,	4,693 80	4 15	17,854 77	15 80
67	Middleborough,	5,178 00	2 71	21,516 50	15 38
68	Braintree,	6,550 00	4 20	27,275 50	17 48
69	Saugus,	5,245 60	2 99	24,170 90	13 79
70	Norwood,	5,370 77	3 15	30,985 11	18 15
71	Milton,	10,228 75	7 56	41,863 13	30 94
72	Bridgewater,	4,600 00	4 83	17,278 00	18 15
73	Marblehead,	4,500 00	3 69	15,899 60	13 02
74	Andover,	6,750 48	5 70	20,593 20	17 37
75	Whitman,	—	—	24,292 22	17 62
76	Stoneham,	2,720 00	2 56	21,840 50	20 56
77	Rockland,	2,203 50	1 93	21,546 17	18 90
78	Montague,	1,400 00	1 26	20,648 58	18 62

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$5,407 22	\$1 62	\$10,009 23	\$2 99	\$20,128 02	\$6 02	\$8,143 56	\$2 43
3,952 89	92	4,165 46	98	10,983 78	2 57	6,677 48	1 56
2,290 39	1 00	4,263 29	1 86	7,267 31	3 18	9,768 75	4 28
1,511 41	63	2,588 98	1 08	7,853 80	3 26	5,378 43	2 23
2,783 20	1 05	4,335 73	1 64	4,820 00	1 83	8,060 82	3 05
3,086 58	1 38	2,081 90	93	5,886 59	2 50	4,460 44	2 00
2,059 40	1 10	3,098 87	1 65	3,201 75	1 71	7,836 13	4 18
3,578 29	2 11	2,163 34	1 28	5,463 63	3 23	6,137 40	3 62
1,608 00	80	2,612 26	1 30	3,378 00	1 68	3,393 17	1 69
1,116 87	65	1,497 54	87	3,120 48	1 81	3,194 17	1 85
2,711 49	1 16	2,221 01	95	5,688 53	2 43	3,720 51	1 59
2,424 21	1 07	2,124 29	93	5,076 36	2 23	4,399 28	1 94
1,809 53	99	4,340 55	2 38	6,096 22	3 34	4,450 25	2 44
504 06	60	1,110 85	1 32	2,324 17	2 76	1,571 47	1 86
1,868 56	86	1,616 80	75	4,193 82	1 94	4,556 58	2 11
1,143 86	1 33	1,611 02	1 88	3,298 65	3 85	2,401 07	2 80
2,517 38	1 17	2,622 87	1 22	4,559 10	2 13	5,324 05	2 48
2,315 68	1 07	2,075 38	96	4,394 90	2 02	4,848 43	2 23
2,465 03	1 05	3,228 54	1 38	5,436 16	2 33	3,363 00	1 44
1,080 39	58	1,841 00	72	4,084 29	2 20	7,577 32	4 08
3,161 85	1 58	3,571 95	1 79	5,607 50	2 81	2,691 75	1 35
883 62	1 13	1,763 65	2 26	2,747 50	3 52	1,865 79	2 39
2,055 12	1 13	3,252 43	1 80	3,490 00	1 93	3,312 20	1 83
1,452 83	98	1,741 07	1 18	3,728 64	2 51	2,929 84	1 98
1,326 58	85	1,033 09	66	4,846 61	3 10	2,402 56	1 54
1,255 88	73	3,617 70	2 10	5,161 16	2 99	4,353 30	2 52
2,297 02	1 22	2,228 80	1 18	4,384 70	2 32	2,424 79	1 28
2,189 70	1 10	1,504 54	75	3,815 11	1 92	4,302 61	2 20
1,490 55	92	780 00	48	3,313 90	2 05	4,372 01	2 70
1,072 48	91	2,012 99	1 71	3,442 00	2 93	2,495 89	2 12
928 38	65	1,685 60	1 18	2,415 26	1 68	3,100 61	2 16
1,122 37	80	1,949 49	1 40	3,194 22	2 29	4,705 20	3 37
1,029 33	91	1,802 14	1 59	2,511 68	2 22	4,631 81	4 10
1,034 31	74	1,384 20	99	2,363 50	1 69	2,437 54	1 75
1,747 82	1 12	1,925 26	1 23	4,609 00	2 95	2,596 76	1 66
1,754 64	1 00	2,272 30	1 30	4,159 50	2 37	6,670 41	3 81
1,930 52	1 13	2,217 14	1 30	3,759 54	2 20	3,401 87	1 99
2,000 94	1 48	3,610 01	2 67	8,124 56	6 00	4,822 70	3 56
1,326 28	1 39	805 91	84	1,458 63	1 53	1,168 88	1 23
1,205 40	99	1,514 30	1 24	2,267 08	1 85	1,770 90	1 45
1,464 72	1 24	1,520 25	1 28	2,224 40	1 88	2,399 45	2 02
1,225 19	94	1,295 47	1 00	3,253 31	2 50	2,005 95	1 54
1,002 25	94	1,427 98	1 34	2,736 58	2 58	3,319 74	3 13
841 46	74	1,143 36	1 00	3,252 43	2 85	2,149 00	1 88
972 13	88	1,220 49	1 10	2,207 59	1 99	3,348 65	3 02

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
		Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
34	Brookline, . . .	\$3,835 71	\$1 15	\$20,910 67	\$6 25	-	-
35	Revere, . . .	2,366 45	55	4,801 81	1 12	\$30 50	\$0 01
36	Leominster, . . .	804 44	35	1,023 56	45	64 00	03
37	Attleborough, . . .	1,312 50	54	3,695 85	1 54	-	-
38	Westfield, . . .	2,204 64	83	3,689 93	1 40	55 55	02
39	Peabody, . . .	1,469 19	66	5,191 80	2 33	-	-
40	Gardner, . . .	237 44	18	9,424 75	5 04	-	-
41	Clinton, . . .	996 76	59	3,892 41	2 30	-	-
42	Milford, . . .	1,054 23	52	1,150 42	57	-	-
43	Adams, . . .	598 99	35	1,410 98	82	-	-
44	Framingham, . . .	1,023 88	44	3,656 54	1 56	-	-
45	Weymouth, . . .	439 80	19	3,171 24	1 40	-	-
46	Watertown, . . .	1,043 84	57	1,654 41	91	-	-
47	Southbridge, . . .	580 07	69	740 42	88	24 07	03
48	Plymouth, . . .	639 63	30	5,869 29	2 72	-	-
49	Webster, . . .	466 69	55	861 12	1 01	-	-
50	Methuen, . . .	276 63	13	2,644 11	1 23	-	-
51	Wakefield, . . .	615 03	28	2,917 14	1 34	-	-
52	Arlington, . . .	1,308 76	56	3,169 44	1 36	-	-
53	Greenfield, . . .	1,170 22	63	2,847 57	1 53	-	-
54	Winthrop, . . .	1,254 02	63	1,543 62	77	-	-
55	Amesbury, . . .	628 51	80	1,909 63	2 45	-	-
56	Natick, . . .	349 16	19	2,091 11	1 16	-	-
57	North Attleborough, . . .	786 36	53	3,062 69	2 07	-	-
58	Danvers, . . .	2,622 91	1 68	1,115 10	71	-	-
59	Winchester, . . .	626 57	36	6,407 22	3 71	12 74	01
60	Dedham, . . .	449 55	24	3,015 96	1 60	132 60	07
61	West Springfield, . . .	439 11	22	3,220 97	1 61	39 70	02
62	Northbridge, . . .	1,596 26	99	3,089 10	1 91	-	-
63	Ware, . . .	446 72	38	804 41	68	-	-
64	Palmer, . . .	551 35	38	998 62	69	-	-
65	Athol, . . .	840 06	60	543 62	39	-	-
66	Easthampton, . . .	336 17	30	1,075 12	95	-	-
67	Middleborough, . . .	125 45	09	1,073 61	77	-	-
68	Braintree, . . .	581 10	37	2,664 23	1 71	36 00	02
69	Saugus, . . .	530 34	30	1,685 39	96	-	-
70	Norwood, . . .	689 81	40	1,659 31	97	19 87	01
71	Milton, . . .	1,691 33	1 25	6,215 03	4 59	4 35	-
72	Bridgewater, . . .	752 74	79	623 38	65	-	-
73	Marblehead, . . .	-	-	1,054 13	86	-	-
74	Andover, . . .	651 79	55	2,982 19	2 52	-	-
75	Whitman, . . .	315 48	24	1,542 75	1 19	21 39	02
76	Stoneham, . . .	1,387 07	1 32	1,673 13	1 58	3 00	-
77	Rockland, . . .	529 38	46	1,332 41	1 17	22 75	02
78	Montague, . . .	906 10	82	1,054 06	95	-	-

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditures for the support of public schools, being the total of items in the eighteen preceding columns.	Cost per pupil in average membership.
\$1,970 41	\$0 59	\$3,008 00	\$0 90	\$2,081 71	\$0 62	\$269,839 56	\$80 66
394 50	09	174 70	04	2,115 38	49	125,567 85	29 33
600 00	28	1,962 25	86	60 00	03	84,674 23	37 05
354 50	15	3,631 50	1 51	723 42	30	87,279 09	36 26
500 00	19	3,118 04	1 18	345 00	13	89,424 10	33 87
1,310 95	59	1,501 56	67	1,819 81	81	81,655 39	36 57
369 25	20	1,772 75	95	1,102 51	58	68,169 29	36 43
800 00	47	-	-	-	-	67,894 08	40 08
403 15	57	1,782 71	89	331 59	16	56,516 52	28 09
500 00	29	273 05	16	426 44	25	50,421 63	29 16
666 00	28	3,132 27	1 34	71 24	03	75,942 42	32 50
281 50	12	2,765 00	1 22	153 74	07	65,253 00	28 71
978 83	54	10 00	01	961 65	53	76,484 70	41 93
250 00	30	1,306 00	1 55	118 88	14	29,532 61	35 03
422 92	20	936 94	43	449 72	21	66,552 63	30 79
250 00	29	275 00	32	1,146 29	1 34	35,972 50	42 02
250 00	12	1,400 00	65	423 00	20	62,871 64	29 34
200 00	09	-	-	-	-	73,710 36	33 95
980 88	42	-	-	583 29	25	84,174 97	36 08
464 00	25	2,268 64	1 22	530 66	29	65,636 17	35 34
200 00	10	500 00	25	1,507 63	76	71,440 82	35 79
342 81	44	1,287 50	1 65	429 99	55	33,174 10	42 47
200 00	11	1,177 26	65	239 98	13	57,809 37	31 94
166 00	11	348 60	24	507 47	34	51,836 74	35 02
-	-	750 00	48	-	-	48,765 59	31 24
1,032 72	60	594 00	34	351 69	20	75,594 73	43 82
1,151 34	61	671 27	36	962 44	51	71,369 15	37 89
312 10	16	700 00	35	299 82	15	55,044 84	27 58
300 00	19	812 72	50	156 50	10	44,966 00	27 81
580 00	49	1,069 30	91	146 50	12	36,467 30	31 04
200 00	14	1,961 00	1 37	992 42	69	39,831 00	27 78
304 72	22	2,635 90	1 89	1,359 64	97	42,690 52	30 58
158 00	14	2,259 15	2 00	361 68	32	38,426 90	34 00
300 00	21	2,176 90	1 56	766 14	55	42,206 15	30 17
-	-	2,105 00	1 35	1,833 32	1 17	54,311 99	34 82
251 50	14	562 00	32	518 83	30	51,422 11	29 33
900 21	53	1,125 00	65	2,647 90	1 55	59,907 76	35 10
788 70	58	1,870 00	1 38	1,150 48	55	92,139 46	68 10
100 00	11	2,126 00	2 23	867 61	91	32,315 60	33 95
695 00	57	157 00	13	571 80	47	32,235 21	26 40
190 00	16	2,177 54	1 84	900 28	76	46,430 27	39 18
205 25	16	-	-	471 81	36	38,275 78	29 47
92 00	09	360 40	34	1,804 06	1 70	39,911 42	37 58
3 00	-	5 50	01	289 87	25	35,686 59	31 30
234 00	21	3,636 02	3 28	406 00	36	39,675 67	35 78

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
34	Brookline,	-	\$4,973 81	\$4,973 81
35	Revere,	\$7,042 96	1,221 39	8,264 35
36	Leominster,	812 78	103 00	915 78
37	Attleborough,	117,571 12	1,061 61	118,632 73
38	Westfield,	-	500 00	500 00
39	Peabody,	28,986 46	1,141 66	30,128 12
40	Gardner,	-	12 70	12 70
41	Clinton,	-	501 04	501 04
42	Milford,	3,057 69	297 60	3,355 29
43	Adams,	291 35	99 88	391 23
44	Framingham,	-	-	-
45	Weymouth,	1,400 00	-	1,400 00
46	Watertown,	23,852 71	-	23,852 71
47	Southbridge,	896 42	-	896 42
48	Plymouth,	14,131 54	-	14,131 54
49	Webster,	-	-	-
50	Methuen,	764 66	1,042 28	1,806 94
51	Wakefield,	-	222 11	222 11
52	Arlington,	277 58	-	277 58
53	Greenfield,	-	500 17	500 17
54	Winthrop,	17,142 80	847 53	17,990 33
55	Amesbury,	-	-	-
56	Natick,	-	-	-
57	North Attleborough,	-	845 20	845 20
58	Danvers,	-	-	-
59	Winchester,	-	182 58	182 58
60	Dedham,	6,528 24	576 70	7,104 94
61	West Springfield,	39,899 40	2,334 78	42,234 18
62	Northbridge,	-	-	-
63	Ware,	3,020 35	215 49	3,235 84
64	Palmer,	15 00	506 07	521 07
65	Athol,	18,447 53	4,114 74	22,562 27
66	Easthampton,	25,969 69	2,453 24	28,422 93
67	Middleborough,	-	-	-
68	Braintree,	10,076 34	7,197 73	17,274 07
69	Saugus,	-	1,038 11	1,038 11
70	Norwood,	745 36	134 28	879 64
71	Milton,	-	-	-
72	Bridgewater,	49,000 00	3,100 00	52,100 00
73	Marblehead,	-	-	-
74	Andover,	-	322 47	322 47
75	Whitman,	38,150 30	-	38,150 30
76	Stoneham,	-	-	-
77	Rockland,	619 45	366 83	986 28
78	Montague,	-	501 52	501 52

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING TOWN FISCAL YEAR.		Expenditures for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 25, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$255,380 73	-	\$52,635 50	-	-	-
119,512 67	\$127 00	22,564 25	-	-	-
79,759 29	565 00	20,976 81	-	-	-
83,402 31	1,162 23	13,785 89	\$888 17	-	-
75,132 94	9,034 78	27,874 86	-	-	-
77,779 54	793 26	17,993 80	150 00	-	-
55,464 90	-	15,544 69	-	-	-
66,799 07	-	11,452 00	-	-	-
50,000 00	1,206 62	11,138 47	20 00	-	-
52,389 25	768 05	9,161 29	-	-	-
74,536 90	1,124 44	19,261 37	-	-	-
63,385 53	169 00	14,414 23	400 00	-	-
70,779 90	-	18,065 61	-	-	-
30,206 12	150 00	6,775 06	-	-	-
64,447 35	-	10,707 00	-	-	-
32,350 33	813 40	11,205 27	-	-	-
48,509 52	1,186 50	9,246 90	-	-	-
67,356 65	1,990 25	17,681 92	-	-	-
81,859 79	1,432 89	21,315 89	300 00	-	-
60,742 18	-	12,974 02	-	-	-
68,405 12	171 33	20,461 52	-	-	-
33,081 68	765 16	10,331 00	-	-	-
59,871 63	-	13,734 19	-	-	-
50,825 89	-	10,204 36	-	-	-
44,954 78	1,950 00	12,048 01	-	-	-
71,000 00	1,685 01	23,523 72	-	-	-
66,742 59	3,314 71	14,587 79	-	-	-
50,000 00	2,814 39	11,188 57	-	-	-
44,551 90	28 00	7,226 43	-	-	-
36,639 56	470 00	7,919 83	-	-	-
41,026 59	-	9,820 36	-	-	-
37,371 35	1,660 77	9,565 70	-	-	-
31,415 80	1,833 48	8,536 82	-	-	-
36,625 54	1,877 14	10,924 65	1,400 00	-	-
55,019 08	653 00	10,922 00	-	-	-
45,540 26	164 75	10,158 74	-	-	-
56,657 37	306 95	10,314 70	90 00	-	-
89,684 51	-	29,767 24	-	-	-
27,846 35	1,243 66	8,858 94	6,100 00	-	-
35,199 59	-	8,298 25	-	-	-
42,209 83	3,757 45	9,329 92	100 00	-	-
37,700 00	1,455 80	8,229 22	-	-	-
38,691 41	206 00	11,144 15	-	-	-
34,378 30	508 00	10,583 35	-	-	-
38,193 87	728 68	9,077 45	-	-	-

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in towns between 6 and 15 years of age.	Number of persons in towns between 7 and 14 years of age.
79	Hudson,	6,743	\$4,046,570	21	1,043	736
80	Spencer,	6,740	3,647,945	23	1,081	769
81	Concord,	6,421	3,430,670	23	991	695
82	Maynard,	6,390	4,080,102	23	832	584
83	Stoughton,	6,316	3,893,380	23	1,089	885
84	Swampscott,	6,204	12,387,906	27	946	668
85	Great Barrington,	5,926	6,342,110	33	828	596
86	Reading,	5,818	6,546,867	25	1,048	745
87	Ipswich,	5,777	5,737,792	21	701	581
88	Grafton,	5,705	2,920,540	21	884	637
89	Winchendon,	5,678	4,209,430	29	1,057	862
90	Blackstone,	5,648	2,370,725	26	1,242	994
91	Franklin,	5,641	4,433,500	27	1,055	705
92	Belmont,	5,542	7,539,455	27	1,066	711
93	North Andover,	5,529	5,529,521	28	947	699
94	Abington,	5,455	3,402,628	19	820	592
95	Westborough,	5,446	3,232,686	15	605	500
96	Wellesley,	5,413	17,129,156	28	753	531
97	Orange,	5,282	4,132,360	24	832	582
98	Mansfield,	5,183	4,180,446	24	857	620
99	Easton,	5,139	6,020,358	26	887	627
100	Fairhaven,	5,122	3,887,090	20	1,003	701
101	Amherst,	5,112	4,425,882	20	829	616
102	Needham,	5,026	7,316,185	31	966	771
103	Chelmsford,	5,010	4,384,005	30	994	694
	Totals,	637,815	\$687,625,968	2,582	111,518	81,468

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 6 years of age.	Number of different pupils within the year over 15 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
1,047	-	128	709	1,006	-	946	94	78
754	9	79	490	657	-	611	93	30
1,264	-	263	670	1,127	-	1,063	95	66
1,044	-	40	709	976	-	888	93	51
975	2	140	631	905	-	852	93	31
1,278	3	180	726	1,153	-	1,092	95	33
1,194	-	147	784	1,117	-	1,060	95	74
1,359	-	206	922	1,162	1	1,111	96	98
842	-	105	624	809	-	779	96	68
874	-	71	689	802	-	756	95	37
1,099	1	95	834	994	-	929	93	50
1,064	-	69	824	1,005	-	952	94	48
1,135	-	210	751	1,081	-	1,006	94	75
1,152	1	150	769	1,040	-	962	92	129
1,031	8	68	712	958	-	896	94	42
1,030	-	171	604	978	-	941	96	61
719	7	114	448	665	-	626	94	43
999	13	170	588	955	-	892	93	69
970	-	175	622	907	-	848	94	54
1,008	5	130	650	942	-	886	93	49
1,094	36	159	701	1,001	-	955	95	53
951	2	160	571	859	-	815	95	26
989	1	179	622	897	-	835	93	60
1,073	5	141	197	1,021	-	968	95	72
942	2	72	651	874	-	821	94	80
112,452	1,125	13,195	72,474	102,912	1	96,676	94	5,909

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
79	Hudson,	3	27	-	7	14	9-1	
80	Spencer,	3	22	-	3	5	9-7	
81	Concord,	6	35	-	11	18	9-4	
82	Maynard,	2	27	-	4	24	9-5	
83	Stoughton,	1	26	-	4	7	9-5	
84	Swampscott,	5	36	1	8	16	9-9	
85	Great Barrington,	2	40	-	6	17	9-5	
86	Reading,	2	35	-	12	24	9-3	
87	Ipswich,	2	24	-	4	7	9-7	
88	Grafton,	1	24	-	4	16	9-5	
89	Winchendon,	2	35	-	5	23	9-2	
90	Blackstone,	1	33	-	2	-	9-15	
91	Franklin,	2	35	-	5	15	9-4	
92	Belmont,	5	28	3	6	19	9-3	
93	North Andover,	1	35	-	5	20	9-3	
94	Abington,	5	25	-	8	22	9-6	
95	Westborough,	2	19	1	2	10	8-17	
96	Wellesly,	5	38	-	10	25	9-1	
97	Orange,	2	28	-	6	15	8-16	
98	Mansfield,	3	28	2	6	11	9-16	
99	Easton,	3	40	-	6	13	9-3	
100	Fairhaven,	6	28	-	9	17	9-8	
101	Amherst,	3	23	-	6	10	9-9	
102	Needham,	3	36	-	5	12	9-10	
103	Chelmsford,	2	33	-	5	26	9-6	
	Totals,	301	3,167	83	518	1,758	9-6	

SCHOOL RETURNS.

XXXV

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

HIGH SCHOOLS.								
Number of high schools.	Length of high school year.	Number of teachers.	NUMBER OF PUPILS.		NUMBER OF PUPILS ADMITTED TO THE FRESHMAN CLASS.		NUMBER OF GRADUATES.	
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1	9-10	8	133	106	44	24	12	13
1	9-18	4	39	49	14	11	6	6
1	9-11	12	143	206	47	54	18	35
1	9-10	5	41	62	10	15	4	7
1	9-13	5	54	64	26	11	3	13
1	9-10	10	84	162	41	43	13	14
1	9-12	7	85	119	35	53	6	17
1	9-13	12	149	163	42	47	26	36
1	9-8	5	67	95	22	30	8	11
1	9-10	5	60	69	27	25	8	8
1	9-13	6	59	77	21	26	7	9
1	10	3	38	58	15	22	2	12
1	9-11	8	89	105	42	37	6	8
1	9-8	7	79	97	40	38	13	19
1	9-9	5	33	50	13	13	1	9
1	9-7	9	106	130	22	28	16	20
1	9-8	5	48	53	14	18	1	9
1	9-10	10	74	101	25	32	9	22
1	9-14	7	92	125	33	34	17	23
1	9-14	7	55	80	22	22	12	13
1	9-12	11	127	112	30	41	12	8
1	9-12	11	72	104	31	43	11	15
1	9-13	6	108	97	27	30	17	15
1	9-13	7	73	96	28	30	6	8
2	9-14	6	29	45	14	13	2	9
71	9-9	642	7,199	8,788	2,511	2,908	898	1,370

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
79	Hudson,	1,006	-	-	\$113 85	\$0 11
80	Spencer,	657	-	-	-	-
81	Concord,	1,127	-	-	501 97	44
82	Maynard,	976	\$175 00	\$0 18	30 16	03
83	Stoughton,	905	350 00	39	60 00	07
84	Swampscott,	1,153	220 00	19	277 96	24
85	Great Barrington,	1,117	-	-	78 33	07
86	Reading,	1,162	-	-	117 85	10
87	Ipswich,	809	-	-	60 00	07
88	Grafton,	802	190 00	24	105 53	13
89	Winchendon,	994	80 00	08	47 39	05
90	Blackstone,	1,005	-	-	-	-
91	Franklin,	1,081	-	-	-	-
92	Belmont,	1,040	-	-	173 45	16
93	North Andover,	958	-	-	35 00	04
94	Abington,	978	300 00	31	-	-
95	Westborough,	665	-	-	73 50	11
96	Wellesley,	955	-	-	247 45	26
97	Orange,	907	25 00	03	163 40	18
98	Mansfield,	942	515 00	55	101 87	11
99	Easton,	1,001	-	-	90 34	09
100	Fairhaven,	859	144 60	17	56 13	07
101	Amherst,	897	150 00	17	48 81	05
102	Needham,	1,021	-	-	72 86	07
103	Chelmsford,	874	275 00	31	49 38	06
	Totals,	102,912	\$10,844 46	\$0 11	\$13,139 62	\$0 13

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$1,550 00	\$1 54	\$27 99	\$0 03	\$1,220 00	\$1 21	-	-
1,600 00	2 44	128 86	20	-	-	-	-
1,350 01	1 19	584 03	52	1,540 00	1 37	-	-
982 93	1 01	390 12	40	1,180 00	1 21	\$7 83	\$0 01
720 00	80	-	-	-	-	25 00	03
1,075 00	93	86 75	08	1,250 00	1 08	-	-
1,800 00	1 61	39 00	03	-	-	58 00	05
800 00	69	71 85	06	1,989 30	1 70	-	-
600 00	74	2 00	-	1,045 18	1 30	38 00	05
1,284 38	1 60	108 34	14	-	-	-	-
1,347 64	1 36	265 49	27	-	-	-	-
888 88	88	-	-	-	-	-	-
1,260 00	1 17	57 00	05	825 00	76	51 00	05
1,750 00	1 68	-	-	1,275 00	1 22	-	-
900 00	94	100 00	10	-	-	-	-
1,100 00	1 12	125 00	13	-	-	-	-
650 00	98	44 67	07	406 00	61	-	-
2,500 00	2 62	145 79	15	1,450 00	1 52	-	-
1,449 98	1 60	195 65	22	740 00	82	-	-
720 00	76	77 25	08	550 00	58	-	-
1,800 00	1 79	289 98	28	969 70	97	27 00	02
1,416 57	1 65	47 05	05	1,340 00	1 56	-	-
1,700 00	1 90	67 84	08	1,189 00	1 83	-	-
2,500 00	2 45	282 77	28	1,155 00	1 13	-	-
1,591 66	1 82	43 85	05	-	-	-	-
\$128,594 36	\$1 25	\$20,439 33	\$1 99	\$84,226 28	\$0 82	\$845 28	\$0 01

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principals' salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
79	Hudson,	\$3,667 00	\$3 65	\$13,630 92	\$13 55
80	Spencer,	4,507 00	6 86	10,459 00	15 92
81	Concord,	4,200 00	3 73	26,104 00	23 16
82	Maynard,	3,209 38	3 28	11,687 48	11 97
83	Stoughton,	3,329 00	3 68	12,505 75	13 82
84	Swampscott,	4,890 00	4 25	22,517 00	19 53
85	Great Barrington,	—	—	23,445 44	20 99
86	Reading,	5,502 80	4 74	19,854 25	17 08
87	Ipswich,	2,800 00	3 46	13,298 34	16 44
88	Grafton,	4,219 70	5 26	8,786 44	10 95
89	Winchendon,	5,204 50	5 23	15,961 43	16 05
90	Blackstone,	2,245 00	2 23	13,300 00	13 23
91	Franklin,	3,461 95	3 20	14,812 05	13 70
92	Belmont,	5,821 88	5 60	20,630 67	19 83
93	North Andover,	4,300 00	4 49	17,016 00	17 76
94	Abington,	4,000 00	4 09	17,413 24	17 80
95	Westborough,	1,200 00	1 80	11,576 15	17 41
96	Wellesley,	6,407 50	6 71	26,633 85	27 89
97	Orange,	3,704 88	4 08	12,790 25	14 10
98	Mansfield,	4,500 00	4 78	14,193 71	15 07
99	Easton,	2,170 00	2 16	22,268 97	22 24
100	Fairhaven,	4,750 00	5 53	19,731 00	22 97
101	Amherst,	3,525 00	3 93	11,789 60	13 14
102	Needham,	5,232 67	5 12	18,960 00	18 57
103	Chelmsford,	2,250 00	2 57	14,485 25	16 57
	Totals,	\$336,222 64	\$3 26	\$1,951,878 03	\$18 97

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$862 99	\$0 86	\$904 35	\$0 89	\$1,977 65	\$1 97	\$2,552 68	\$2 54
794 99	1 21	1,358 05	2 07	2,446 00	3 72	788 48	1 20
1,764 39	1 57	7,165 29	6 36	2,707 33	2 40	3,902 03	3 46
622 45	64	2,613 00	2 68	1,800 00	1 84	2,283 98	2 34
611 87	68	1,098 20	1 21	1,869 44	2 07	1,521 01	1 68
1,216 01	1 05	1,225 36	1 06	4,052 50	3 52	3,664 68	3 18
795 85	71	813 08	73	2,842 70	2 55	2,005 27	1 80
813 85	70	1,441 84	1 24	3,342 81	2 88	2,643 53	2 27
889 96	1 10	1,582 63	1 96	1,703 00	2 11	959 08	1 19
504 17	63	629 52	78	1,947 47	2 43	3,162 18	3 94
841 46	85	1,310 34	1 32	3,328 00	3 35	2,740 08	2 76
900 00	89	600 00	59	1,034 00	1 02	1,100 00	1 09
1,620 79	1 50	2,697 40	2 50	2,420 50	2 24	2,420 61	2 24
811 64	78	1,473 75	1 41	2,837 82	2 78	2,018 04	1 94
931 13	97	1,404 73	1 47	2,603 39	2 72	1,957 25	2 04
1,000 00	1 02	1,025 31	1 05	2,443 33	2 50	1,250 08	1 28
617 23	93	616 09	93	1,200 00	1 80	1,340 44	2 02
1,268 36	1 33	2,044 45	2 14	4,837 00	5 07	2,594 40	2 72
1,333 01	1 47	1,271 97	1 40	2,071 08	2 28	2,960 58	3 26
807 57	86	2,090 25	2 22	2,099 66	2 23	4,076 85	4 33
1,351 63	1 35	2,194 86	2 19	2,408 87	2 41	1,926 26	1 92
408 29	48	2,001 37	2 33	4,840 00	5 63	1,677 77	1 95
873 20	97	540 24	60	1,090 79	1 22	2,389 12	2 66
1,038 23	1 01	2,360 00	2 31	2,734 34	2 67	2,679 54	2 62
780 25	89	966 94	1 10	2,142 75	2 45	3,490 77	3 99
\$106,465 15	\$1 03	\$147,818 03	\$1 43	\$269,110 39	\$2 61	\$243,137 23	\$2 36

BOARD OF EDUCATION.

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
		Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
79	Hudson, . . .	\$719 50	\$0 72	\$1,026 30	\$1 02	\$48 00	\$0 05
80	Spencer, . . .	21 39	03	1,074 34	1 64	-	-
81	Concord, . . .	1,183 28	1 05	1,690 79	1 50	-	-
82	Maynard, . . .	679 32	70	1,622 30	1 66	18 75	02
83	Stoughton, . . .	161 82	18	1,262 84	1 40	-	-
84	Swampscott, . . .	912 46	79	1,325 53	1 15	-	-
85	Great Barrington, . . .	590 58	53	365 62	33	-	-
86	Reading, . . .	1,265 85	1 09	604 50	52	-	-
87	Ipswich, . . .	495 68	61	2,234 13	2 76	-	-
88	Grafton, . . .	104 93	13	983 44	1 23	-	-
89	Winchendon, . . .	359 66	36	2,295 39	2 31	-	-
90	Blackstone, . . .	-	-	153 36	15	-	-
91	Franklin, . . .	202 41	19	2,349 69	2 17	14 00	01
92	Belmont, . . .	404 14	39	713 08	68	1 86	-
93	North Andover, . . .	702 23	73	1,347 31	1 41	179 20	19
94	Abington, . . .	904 91	93	1,775 10	1 82	-	-
95	Westborough, . . .	269 83	41	269 60	41	-	-
96	Wellesley, . . .	1,279 55	1 34	1,416 76	1 48	-	-
97	Orange, . . .	299 85	33	1,021 49	1 13	-	-
98	Mansfield, . . .	242 88	26	1,428 68	1 52	-	-
99	Easton, . . .	418 50	41	2,433 21	2 43	60 03	06
100	Fairhaven, . . .	3,677 05	4 27	1,437 52	1 67	-	-
101	Amherst, . . .	824 24	92	755 98	84	-	-
102	Needham, . . .	323 82	31	1,767 69	1 73	-	-
103	Chelmsford, . . .	302 07	35	1,457 05	1 67	-	-
	Totals, . . .	\$57,978 39	\$0 56	\$167,971 95	\$1 63	\$788 36	\$0 01

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditure for the support of public schools, being the total of items in the eighteen preceding columns.	Cost per pupil in average membership.
\$203 00	\$0 20	\$995 70	\$0 99	\$575 79	\$0 57	\$30,075 72	\$29 89
32 50	05	1,137 36	1 73	-	-	24,347 97	37 06
483 45	43	3,949 25	3 50	148 15	13	57,273 97	50 82
458 60	47	324 00	33	1,494 34	1 53	29,579 64	30 31
100 00	11	354 24	39	367 86	41	24,337 03	26 89
225 00	20	400 00	35	2,407 33	2 09	45,745 58	39 68
58 40	05	1,462 15	1 31	501 70	45	34,856 12	31 21
100 00	09	731 25	63	63 01	05	39,342 69	33 86
200 00	25	1,032 50	1 28	1,901 92	2 35	27,759 24	34 31
100 00	12	3,644 35	4 54	-	-	26,853 63	33 48
40 00	04	1,818 98	1 83	1,108 56	1 12	36,748 92	36 97
-	-	-	-	-	-	20,221 24	20 12
251 25	23	2,496 50	2 31	-	-	34,940 15	32 31
101 50	10	287 00	27	61 73	06	38,361 56	36 89
150 00	16	226 00	24	37 50	04	31,889 74	33 29
-	-	1,200 00	1 23	105 00	11	32,641 97	33 38
100 00	15	2,152 86	3 24	299 21	45	20,815 58	31 30
-	-	1,480 68	1 55	1,240 44	1 30	53,548 23	56 07
58 00	06	3,164 00	3 49	291 04	32	31,540 18	34 77
350 00	37	777 80	82	193 49	21	32,725 01	34 74
425 00	42	3,002 94	3 00	98 20	10	41,935 49	41 89
204 50	24	1,918 50	2 23	-	-	43,650 35	50 82
183 86	20	1,075 30	1 20	107 70	12	26,310 68	29 33
200 00	20	745 15	73	718 56	70	40,770 63	39 93
250 00	29	1,808 50	2 07	132 00	15	30,025 47	34 35
\$24,929 30	\$0 24	\$96,572 08	\$0 94	\$44,841 72	\$0 44	\$3,705,802 60	\$36 01

GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
79	Hudson,	-	\$154 91	\$154 91
80	Spencer,	\$71 47	-	71 47
81	Concord,	7,000 00	1,114 11	8,114 11
82	Maynard,	-	13 72	13 72
83	Stoughton,	-	-	-
84	Swampscott,	53,015 56	413 90	53,429 46
85	Great Barrington,	-	384 75	384 75
86	Reading,	576 51	-	576 51
87	Ipswich,	924 67	11 19	935 86
88	Grafton,	-	-	-
89	Winchendon,	-	-	-
90	Blackstone,	-	-	-
91	Franklin,	1,175 00	983 00	2,158 00
92	Belmont,	150 88	1,124 33	1,275 21
93	North Andover,	1,994 70	-	1,994 70
94	Abington,	-	-	-
95	Westborough,	676 00	155 00	831 00
96	Wellesley,	-	1,214 47	1,214 47
97	Orange,	-	-	-
98	Mansfield,	400 44	474 30	874 74
99	Easton,	-	2,599 86	2,599 86
100	Fairhaven,	-	241 66	241 66
101	Amherst,	-	-	-
102	Needham,	1,443 00	131 45	1,574 45
103	Chelmsford,	295 50	-	295 50
	Totals,	\$476,423 46	\$45,431 17	\$521,854 63

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING TOWN FISCAL YEAR.		Expenditures for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 25, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$29,117 48	\$868 93	\$3,747 14	-	-	-
24,480 21	483 07	4,888 00	\$10 00	-	-
46,612 33	8,144 13	23,653 21	-	-	-
28,605 93	-	6,900 24	-	-	-
23,620 00	291 05	4,751 54	-	-	-
42,033 10	-	12,321 56	-	-	-
34,160 73	1,237 17	7,356 69	-	-	-
35,423 49	2,578 89	14,232 07	-	-	-
25,252 10	1,238 79	4,926 28	-	-	-
24,516 71	937 50	6,817 09	-	-	-
27,908 18	8,921 10	8,755 60	-	-	-
17,750 00	611 65	2,675 00	-	\$1,145 06	-
33,153 19	675 42	8,080 06	-	-	-
35,972 67	123 00	10,404 57	\$185 00	-	-
32,567 41	25 00	6,269 76	-	-	-
25,489 15	944 50	11,960 42	-	-	-
19,460 86	173 36	6,350 32	-	-	-
52,321 76	-	16,114 04	-	-	-
29,971 57	-	8,495 85	-	-	-
33,219 80	78 50	9,681 03	100 00	-	-
30,809 60	4,188 34	15,307 79	-	-	-
19,973 82	23,021 47	23,126 09	-	-	-
24,047 42	1,424 28	8,063 75	-	-	-
39,597 77	393 00	11,103 81	-	-	-
30,150 99	-	6,134 98	-	-	-
\$3,449,644 24	\$102,476 85	\$888,148 53	\$9,743 17	\$1,145 06	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13.

	TOWNS.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in towns between 6 and 15 years of age.	Number of persons in towns between 7 and 14 years of age.
104	Hingham,	4,965	\$7,790,925	20	777	557
105	Ludlow,	4,948	4,287,204	25	1,125	741
106	Lexington,	4,918	8,106,015	20	840	562
107	South Hadley,	4,894	3,157,050	24	925	677
108	Walpole,	4,892	6,434,562	22	967	677
109	Canton,	4,797	5,333,390	17	1,067	865
110	Monson,	4,758	1,919,430	23	653	453
111	Millbury,	4,740	2,983,532	21	899	755
112	Barnstable,	4,676	7,937,990	24	756	558
113	Uxbridge,	4,671	3,532,500	28	894	611
114	Dartmouth,	4,378	4,603,575	23	1,013	676
115	Provincetown,	4,369	2,288,517	23	818	635
116	Randolph,	4,301	2,731,000	17	836	627
117	Dudley,	4,267	1,986,847	16	828	706
118	Rockport,	4,211	3,782,480	20	759	543
119	Warren,	4,188	2,101,986	14	811	584
120	Lee,	4,106	2,408,632	15	745	552
121	Wareham,	4,102	5,530,274	22	747	554
122	Foxborough,	3,863	2,582,600	16	563	422
123	Templeton,	3,756	1,824,912	17	726	517
124	Tewksbury,	3,750	1,513,840	7	316	255
125	Williamstown,	3,708	4,280,873	25	723	506
126	Dalton,	3,568	4,566,610	20	715	470
127	Hardwick,	3,524	3,002,180	15	568	437
128	Agawam,	3,501	2,293,308	17	685	519
129	Medfield,	3,466	1,690,824	7	219	157
130	Dracut,	3,461	2,523,325	18	746	538
131	East Bridgewater,	3,363	2,257,623	18	625	439
132	Oxford,	3,361	2,051,448	17	659	528
133	Leicester,	3,237	2,431,015	20	642	518
134	Falmouth,	3,144	11,796,757	21	615	407
135	Sutton,	3,078	1,545,119	16	571	460
136	North Brookfield,	3,075	1,884,808	10	522	371
137	Lenox,	3,060	7,831,883	23	594	470
138	Nantucket,	2,962	4,245,990	12	431	332
139	Barre,	2,957	2,502,540	14	515	351
140	Pepperell,	2,953	2,268,618	14	494	386
141	Westport,	2,928	2,208,150	18	490	389
142	Westford,	2,851	2,148,092	15	428	325
143	Holbrook,	2,816	1,598,007	14	489	346
144	Somerset,	2,798	1,582,130	13	538	403
145	Ayer,	2,797	2,301,131	11	420	308
146	Billerica,	2,789	2,829,906	13	557	415
147	Holliston,	2,711	1,968,587	13	472	343
148	Medway,	2,696	1,716,265	13	461	319

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13.

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 5 years of age.	Number of different pupils within the year over 5 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
927	6	146	555	877	-	812	93	57
852	3	49	625	711	-	660	92	19
992	-	162	597	920	-	868	95	62
974	5	59	711	916	-	842	92	39
1,120	41	107	715	1,019	-	937	92	65
709	-	113	417	600	-	564	93	59
709	-	81	479	641	-	600	94	30
842	-	48	664	792	4	750	95	55
840	-	116	547	777	-	719	93	45
1,040	6	83	684	932	-	862	92	19
807	-	36	637	739	14	681	92	22
910	-	24	596	806	-	751	93	44
867	-	85	564	760	-	721	94	54
502	7	11	355	433	25	393	91	11
870	9	68	606	795	-	778	98	40
626	-	94	425	563	-	534	95	31
656	24	97	407	566	-	513	90	36
824	1	84	549	723	-	647	90	25
660	-	90	435	610	-	566	93	40
704	1	67	492	639	-	589	92	36
280	-	8	224	251	54	230	92	24
807	1	113	519	727	-	679	93	29
758	-	101	469	707	-	654	92	25
461	-	78	257	427	-	409	96	36
602	-	14	526	550	44	499	92	27
283	-	46	171	258	-	242	94	19
636	-	5	454	591	52	547	93	41
686	2	60	434	646	-	605	94	34
592	-	46	434	554	-	526	95	24
665	-	39	492	618	-	581	94	49
703	16	98	420	626	-	588	94	38
428	1	16	337	376	12	346	92	9
401	-	90	231	367	-	347	94	14
686	10	86	453	611	-	557	91	21
530	8	59	332	485	-	459	94	36
520	-	60	350	472	-	448	95	30
521	-	85	341	467	-	436	93	36
459	-	25	372	415	-	380	92	11
494	7	34	356	457	-	425	93	25
553	-	39	413	499	-	460	92	32
578	11	31	410	517	-	482	94	21
504	6	80	318	468	-	425	91	35
571	-	46	417	481	-	441	92	31
545	-	82	332	474	-	433	91	25
560	9	65	353	489	-	445	91	16

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
104	Hingham,	4	24	3	8	13	9-9	
105	Ludlow,	1	28	-	2	15	9-6	
106	Lexington,	4	26	1	9	18	9-4	
107	South Hadley,	1	30	-	5	13	9-7	
108	Walpole,	5	39	1	6	18	9-13	
109	Canton,	2	24	-	6	12	8-18	
110	Monson,	5	27	-	7	13	9-8	
111	Millbury,	3	25	1	5	19	8-19	
112	Barnstable,	10	21	2	6	15	8-17	
113	Uxbridge,	1	31	-	3	11	8-17	
114	Dartmouth,	3	25	-	2	15	8-19	
115	Provincetown,	2	22	-	2	12	9-7	
116	Randolph,	3	18	-	4	6	9-6	
117	Dudley,	2	17	-	2	8	9-4	
118	Rockport,	1	24	-	3	12	9-2	
119	Warren,	2	17	-	3	9	9-2	
120	Lee,	2	18	-	4	6	9-4	
121	Wareham,	1	25	1	4	7	8-15	
122	Foxborough,	1	19	-	3	11	9-2	
123	Templeton,	1	19	-	3	8	9-1	
124	Tewksbury,	-	7	-	-	5	9-15	
125	Williamstown,	4	28	-	5	16	8-18	
126	Dalton,	1	25	-	4	16	9-4	
127	Hardwick,	1	19	2	4	9	9-9	
128	Agawam,	-	17	-	-	11	9-2	
129	Medfield,	1	8	-	2	4	9-13	
130	Dracut,	-	19	-	-	17	9-16	
131	East Bridgewater,	2	19	-	2	14	8-9	
132	Oxford,	1	22	-	4	16	9-1	
133	Leicester,	2	23	1	4	10	8-19	
134	Falmouth,	3	22	-	5	7	8-16	
135	Sutton,	1	15	-	2	4	9-1	
136	North Brookfield,	1	12	1	4	4	9-4	
137	Lenox,	2	27	-	4	25	9-14	
138	Nantucket,	2	17	-	3	5	9-6	
139	Barre,	1	16	-	4	7	9-8	
140	Pepperell,	1	19	-	5	13	9-9	
141	Westport,	1	18	1	1	4	8-15	
142	Westford,	1	17	-	3	9	8-16	
143	Holbrook,	1	15	-	3	10	9-2	
144	Somerset,	1	18	1	3	3	9-2	
145	Ayer,	1	13	1	3	7	9-7	
146	Billerica,	2	12	-	3	9	9-1	
147	Holliston,	1	14	-	3	8	8-16	
148	Medway,	1	14	-	3	10	8-18	

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

HIGH SCHOOLS.

Number of high schools.	Length of high school year.	Number of teachers.	NUMBER OF PUPILS.		NUMBER OF PUPILS ADMITTED TO THE FRESHMAN CLASS.		NUMBER OF GRADUATES.	
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1	9-12	8	97	102	40	24	7	18
1	9-7	3	17	29	3	11	5	4
1	9-6	10	102	116	42	41	9	15
1	9-15	5	24	64	9	21	5	9
1	9-15	6	69	98	29	42	4	13
1	9-15	6	54	87	26	27	7	16
1 ¹	8-3	7	34	45	9	25	4	6
1	9-14	5	47	52	18	20	7	12
2	9-18	6	50	68	14	21	4	13
1	9-17	4	50	52	21	20	2	13
3	9-16	5	15	26	13	16	3	8
1	9-15	3	49	49	15	18	6	10
1	9-8	5	74	88	42	28	7	22
1	9-12	2	5	10	5	5	2	1
1	9-15	5	28	52	13	19	2	11
1	9-14	6	56	83	18	24	6	18
1	10	4	42	55	18	16	7	10
1	9-7	5	44	46	12	10	5	5
1	9-16	4	35	47	10	10	2	11
1	9-19	4	41	62	12	8	3	3
-	-	-	-	-	-	-	-	-
1	9-5	5	71	89	21	24	12	11
1	9-15	4	43	59	20	24	8	9
1	9-18	5	38	52	13	21	6	10
-	-	-	-	-	5	6	3	7
1	9-13	3	18	30	8	9	-	6
-	-	-	-	-	-	-	-	-
1	9-7	3	33	47	13	19	6	5
1	9-12	4	29	46	14	12	3	8
1	10	4	39	40	22	13	3	11
1	9-18	6	61	59	29	17	9	13
1	10	2	9	23	3	7	-	2
1	9-15	4	45	56	13	24	8	11
1	9-15	4	35	54	17	25	6	10
1	9-5	4	35	70	6	18	3	8
1	9-17	4	38	45	16	18	6	4
1	9-9	4	50	60	17	20	8	8
1	9-14	1	4	2	2	1	1	1
1 ²	9-16	3	19	34	13	6	1	6
1	9-8	3	37	47	22	11	1	5
1	9-19	3	20	35	8	20	-	1
1	9-17	4	49	47	26	12	4	11
1 ³	9-14	3	21	27	10	8	5	7
1	9-16	3	37	38	17	16	5	7
1	9-14	3	23	37	7	11	4	5

¹ Monson Academy.

² Westford Academy.

³ Howe Academy.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
104	Hingham,	877	-	-	-	-
105	Ludlow,	711	\$208 25	\$0 29	\$151 05	\$0 21
106	Lexington,	920	-	-	-	-
107	South Hadley,	916	-	-	151 63	17
108	Walpole,	1,019	-	-	250 36	25
109	Canton,	600	25 00	04	76 35	13
110	Monson,	641	-	-	42 00	07
111	Millbury,	792	150 00	19	-	-
112	Barnstable,	777	-	-	50 00	06
113	Uxbridge,	932	50 00	05	64 00	07
114	Dartmouth,	739	300 00	41	213 05	29
115	Provincetown,	806	150 00	19	-	-
116	Randolph,	760	300 00	39	24 25	03
117	Dudley,	433	80 00	18	85 17	20
118	Rockport,	795	-	-	18 00	02
119	Warren,	563	-	-	85 80	15
120	Lee,	566	350 00	62	20 00	04
121	Wareham,	723	160 00	22	108 90	15
122	Foxborough,	610	175 00	29	120 52	20
123	Templeton,	639	103 48	16	51 10	08
124	Tewksbury,	251	62 50	25	19 16	08
125	Williamstown,	727	80 00	11	71 25	10
126	Dalton,	707	325 00	46	73 82	10
127	Hardwick,	427	100 00	23	43 03	10
128	Agawam,	550	170 00	31	44 72	08
129	Medfield,	258	105 00	41	18 70	07
130	Dracut,	591	50 00	08	-	-
131	East Bridgewater,	646	32 00	05	25 00	04
132	Oxford,	554	-	-	112 35	20
133	Leicester,	618	150 00	24	88 00	14
134	Falmouth,	626	-	-	503 52	80
135	Sutton,	376	150 00	40	25 00	07
136	North Brookfield,	367	50 00	14	750 00	2 04
137	Lenox,	611	100 00	16	82 50	14
138	Nantucket,	485	100 00	21	84 37	17
139	Barre,	472	-	-	-	-
140	Pepperell,	467	150 00	32	57 25	12
141	Westport,	415	238 75	58	-	-
142	Westford,	457	-	-	-	-
143	Holbrook,	499	140 00	28	18 40	04
144	Somerset,	517	100 00	19	80 51	16
145	Ayer,	468	-	-	7 00	01
146	Billerica,	481	180 00	37	71 71	15
147	Holliston,	474	60 00	13	-	-
148	Medway,	489	-	-	41 00	08

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$1,680 00	\$1 92	\$106 80	\$0 12	\$1,200 00	\$1 37	-	-
1,180 00	1 66	21 02	03	777 80	1 09	-	-
400 00	44	867 81	94	-	-	-	-
1,352 83	1 48	22 09	02	1,268 00	1 38	-	-
1,622 00	1 59	86 59	08	-	-	-	-
1,865 00	3 11	-	-	1,400 00	2 33	-	-
1,260 00	1 97	45 69	07	840 00	1 31	\$100 50	\$0 16
1,186 85	1 50	65 55	08	803 00	1 01	22 00	03
1,800 00	2 32	6 75	01	-	-	-	-
1,010 00	1 08	28 00	03	-	-	-	-
1,781 80	2 41	119 75	16	425 00	58	1 75	-
1,115 16	1 38	-	-	380 00	47	-	-
640 00	84	51 10	07	385 00	51	1 03	-
700 00	1 62	49 63	11	831 62	1 92	-	-
1,450 00	1 82	75 27	09	600 00	75	22 41	03
1,229 97	2 18	88 67	16	660 00	1 17	-	-
768 00	1 36	-	-	-	-	-	-
986 66	1 36	10 62	01	-	-	-	-
837 00	1 37	104 37	17	-	-	-	-
900 00	1 41	36 66	06	312 25	49	6 36	01
440 00	1 75	-	-	450 00	1 79	-	-
1,200 00	1 65	80 81	11	350 00	48	-	-
1,650 00	2 33	67 76	10	1,887 50	2 67	-	-
720 00	1 69	78 67	18	-	-	-	-
660 00	1 20	28 50	05	481 01	87	-	-
450 00	1 74	-	-	470 00	1 82	20 70	08
960 00	1 62	70 47	12	750 00	1 27	-	-
1,629 16	2 52	124 29	19	300 00	46	-	-
696 46	1 26	19 96	04	754 25	1 36	48 00	09
800 00	1 29	-	-	795 00	1 29	-	-
1,820 14	2 91	53 63	09	-	-	-	-
750 00	1 99	45 00	12	-	-	-	-
-	-	-	-	-	-	-	-
1,700 00	2 78	166 36	27	800 00	1 31	3 50	01
1,425 00	2 94	60 08	12	-	-	-	-
720 00	1 53	162 79	34	-	-	-	-
962 67	2 06	38 18	08	747 00	1 60	-	-
1,080 00	2 60	68 98	17	625 00	1 51	-	-
850 00	1 86	13 71	03	-	-	-	-
533 32	1 07	21 25	04	358 29	72	177 05	35
600 00	1 16	5 00	01	-	-	-	-
800 00	1 71	34 79	07	550 00	1 17	-	-
880 00	1 83	50 30	10	1,000 00	2 08	-	-
740 00	1 56	12 06	03	399 98	84	20 00	04
740 00	1 51	-	-	421 50	86	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principals' salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
104	Hingham,	\$4,600 00	\$5 25	\$16,512 75	\$18 83
105	Ludlow,	2,850 00	4 01	13,045 15	18 35
106	Lexington,	5,178 82	5 63	20,839 00	22 65
107	South Hadley,	2,365 86	2 58	11,652 14	12 72
108	Walpole,	4,480 00	4 40	16,574 20	16 26
109	Canton,	3,420 00	5 70	11,851 10	19 75
110	Monson,	—	—	9,873 30	15 40
111	Millbury,	3,442 38	4 35	9,697 50	12 24
112	Barnstable,	7,050 00	9 07	12,082 00	15 55
113	Uxbridge,	3,686 00	3 95	11,628 00	12 37
114	Dartmouth,	3,050 00	4 13	12,219 60	16 54
115	Provincetown,	4,151 00	5 15	6,947 00	8 62
116	Randolph,	3,400 24	4 47	8,311 24	10 94
117	Dudley,	3,589 00	8 29	5,802 95	13 40
118	Rockport,	2,100 00	2 64	9,655 15	12 14
119	Warren,	2,500 26	4 44	7,738 74	13 75
120	Lee,	2,300 00	4 06	9,157 00	16 18
121	Wareham,	1,350 00	1 87	12,787 00	17 69
122	Foxborough,	2,759 11	4 52	8,333 32	13 66
123	Templeton,	1,000 00	1 56	7,861 65	12 30
124	Tewksbury,	609 75	2 43	2,874 25	11 45
125	Williamstown,	3,332 10	4 58	12,337 00	16 97
126	Dalton,	2,431 40	3 44	10,351 38	14 64
127	Hardwick,	2,640 00	6 18	7,974 50	18 68
128	Agawam,	—	—	7,564 45	13 75
129	Medfield,	1,200 00	4 65	4,060 88	15 74
130	Dracut,	—	—	9,036 50	15 29
131	East Bridgewater,	2,000 00	3 10	8,634 65	13 37
132	Oxford,	1,697 00	3 06	8,074 00	14 57
133	Leicester,	4,178 20	6 76	8,748 01	14 16
134	Falmouth,	2,649 98	4 23	14,421 30	23 04
135	Sutton,	1,592 00	4 23	4,801 00	12 77
136	North Brookfield,	1,150 00	3 13	6,403 00	17 45
137	Lenox,	2,867 50	4 69	14,967 51	24 50
138	Nantucket,	1,000 00	2 06	7,982 00	16 46
139	Barre,	1,300 00	2 75	8,671 37	18 37
140	Pepperell,	2,407 48	5 16	7,147 39	15 30
141	Westport,	1,532 00	3 69	7,094 00	17 09
142	Westford,	2,884 00	6 31	6,523 00	14 27
143	Holbrook,	1,693 48	3 39	6,357 44	12 74
144	Somerset,	800 00	1 55	7,392 00	14 30
145	Ayer,	1,894 00	4 05	6,117 00	13 07
146	Billerica,	1,800 00	3 74	5,947 50	12 36
147	Holliston,	1,650 08	3 48	5,748 29	12 13
148	Medway,	1,508 50	3 08	5,526 70	11 30

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$984 50	\$1 12	\$711 17	\$0 81	\$3,052 70	\$3 48	\$2,575 27	\$2 94
448 88	63	716 58	1 01	2,077 21	2 92	4,326 86	6 09
1,242 81	1 35	2,505 34	2 72	3,000 69	3 26	2,540 95	2 76
1,206 34	1 32	1,074 45	1 17	2,022 73	2 21	1,990 82	2 17
1,500 00	1 47	1,112 78	1 09	2,570 00	2 52	2,267 47	2 23
803 74	1 34	884 50	1 48	2,942 50	4 90	1,510 10	2 52
672 01	1 05	323 93	51	844 00	1 32	932 14	1 45
790 17	1 00	1,027 54	1 30	1,490 18	1 88	1,621 77	2 05
1,200 00	1 54	632 88	81	2,087 51	2 69	3,111 09	4 00
621 87	67	831 61	89	1,588 35	1 70	4,578 34	4 91
747 33	1 01	479 81	65	1,972 26	2 67	1,236 93	1 67
480 20	60	1,177 28	1 46	1,084 00	1 34	1,831 21	2 27
996 21	1 31	164 42	22	1,383 18	1 82	1,321 75	1 74
458 22	1 06	305 04	70	1,191 00	2 75	1,099 93	2 54
724 14	91	634 06	80	1,440 10	1 81	1,006 26	1 27
469 13	83	661 42	1 17	1,330 80	2 36	745 24	1 32
900 00	1 59	423 78	75	1,152 00	2 04	1,091 83	1 93
1,726 89	2 39	200 00	28	1,964 76	2 72	1,917 49	2 65
792 25	1 30	746 41	1 22	1,523 36	2 50	2,478 39	4 06
369 24	58	443 37	69	695 41	1 09	827 14	1 29
118 42	47	345 94	1 38	697 00	2 78	469 44	1 87
913 90	1 26	538 40	74	1,869 88	2 57	2,279 00	3 13
1,214 21	1 72	1,475 49	2 09	1,864 91	2 64	1,801 08	2 55
204 35	48	449 83	1 05	1,428 40	3 34	1,567 29	3 67
341 61	62	352 11	64	1,088 81	1 98	1,297 30	2 36
220 64	85	400 74	1 55	681 20	2 64	885 97	3 43
357 06	60	455 32	77	1,820 00	3 08	1,487 57	2 52
623 44	97	517 77	80	934 25	1 45	1,127 22	1 74
555 54	1 00	561 35	1 01	1,313 85	2 37	1,715 60	3 10
228 26	37	210 35	34	1,544 71	2 50	1,606 72	2 60
706 93	1 13	1,393 89	2 23	2,455 48	3 92	2,053 46	3 28
121 83	32	202 13	54	734 00	1 95	902 47	2 40
432 99	1 18	785 41	2 14	520 00	1 22	494 89	1 35
695 16	1 14	872 80	1 43	3,194 25	5 23	2,370 81	3 88
213 09	44	431 83	89	688 25	1 42	723 54	1 49
381 50	81	1,382 63	2 93	1,186 17	2 51	2,317 28	4 91
304 26	65	703 53	1 51	1,445 34	3 09	1,439 41	3 08
636 18	1 53	547 60	1 32	990 99	2 39	813 05	1 96
410 49	90	266 93	58	1,435 43	3 14	1,958 11	4 28
332 98	67	419 10	84	1,073 63	2 15	651 85	1 31
410 15	79	315 56	61	964 56	1 87	556 50	1 08
406 25	87	518 90	1 11	884 00	1 89	1,139 78	2 43
574 59	1 19	856 91	1 78	1,236 00	2 67	896 22	1 86
417 74	88	584 59	1 23	785 00	1 66	682 53	1 44
553 93	1 13	259 29	53	583 50	1 19	1,224 82	2 50

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
		Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
104	Hingham,	\$91 13	\$0 10	\$611 22	\$0 70	-	-
105	Ludlow,	638 77	90	865 58	1 22	-	-
106	Lexington,	453 82	49	2,209 24	2 40	-	-
107	South Hadley,	662 23	72	1,092 18	1 19	-	-
108	Walpole,	1,247 39	1 22	628 68	62	-	-
109	Canton,	239 90	40	871 31	1 45	-	-
110	Monson,	142 92	22	1,046 65	1 63	-	-
111	Millbury,	646 78	82	1,398 57	1 77	-	-
112	Barnstable,	-	-	2,232 42	2 87	-	-
113	Uxbridge,	702 87	76	918 45	99	-	-
114	Dartmouth,	124 17	17	1,932 27	2 61	\$11 19	\$0 02
115	Provincetown,	508 40	63	681 09	85	-	-
116	Randolph,	271 94	36	901 62	1 19	-	-
117	Dudley,	97 57	23	243 82	56	-	-
118	Rockport,	290 23	37	1,535 59	1 93	-	-
119	Warren,	187 29	33	459 27	82	9 09	02
120	Lee,	513 35	91	300 84	53	-	-
121	Wareham,	234 81	32	761 84	1 05	-	-
122	Foxborough,	97 63	16	697 42	1 14	-	-
123	Templeton,	77 17	12	2,023 00	3 17	-	-
124	Tewksbury,	108 89	43	779 93	3 10	-	-
125	Williamstown,	213 27	29	1,904 39	2 62	-	-
126	Dalton,	663 93	94	3,097 66	4 38	-	-
127	Hardwick,	447 10	1 05	1,200 00	2 81	170 00	40
128	Agawam,	224 90	41	277 46	50	-	-
129	Medfield,	142 50	55	458 18	1 78	-	-
130	Dracut,	210 50	36	960 05	1 62	-	-
131	East Bridgewater,	49 65	08	563 20	87	-	-
132	Oxford,	400 67	72	399 74	72	19 60	04
133	Leicester,	198 89	32	274 03	44	-	-
134	Falmouth,	627 72	1 00	1,869 55	2 99	-	-
135	Sutton,	286 75	76	740 39	1 97	-	-
136	North Brookfield,	-	-	691 62	1 88	-	-
137	Lenox,	626 34	1 02	714 14	1 17	-	-
138	Nantucket,	81 83	17	1,053 85	2 17	-	-
139	Barre,	161 20	34	950 19	2 01	16 50	03
140	Pepperell,	398 15	85	510 73	1 09	-	-
141	Westport,	63 97	15	964 03	2 32	-	-
142	Westford,	395 94	87	369 17	81	-	-
143	Holbrook,	182 93	36	473 53	95	-	-
144	Somerset,	63 50	12	360 34	70	-	-
145	Ayer,	88 82	19	721 26	1 54	-	-
146	Billerica,	168 19	35	1,171 16	2 43	-	-
147	Holliston,	563 84	1 19	1,000 41	2 11	-	-
148	Medway,	25 00	05	606 82	1 24	-	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditure for the support of public schools being the total of items in the eighteen preceding columns.	Cost per pupil in average membership.
\$400 00	\$0 46	\$1,375 00	\$1 57	\$1,350 29	\$1 54	\$35,250 83	\$40 19
150 00	21	2,975 10	4 18	626 22	88	31,058 47	43 68
331 09	36	3,768 25	4 09	671 09	73	44,008 91	47 83
135 00	15	2,128 50	2 32	129 63	14	27,254 43	29 75
206 08	20	2,445 00	2 40	20 00	02	35,010 55	34 35
898 05	1 50	380 00	63	248 72	41	27,416 27	45 69
150 00	23	272 75	43	4,282 58	6 68	20,828 47	32 49
204 50	26	844 20	1 07	904 31	1 14	24,295 30	30 67
150 00	19	5,269 53	6 78	-	-	35,672 23	45 91
-	-	475 57	52	-	-	26,083 06	27 99
206 95	28	3,494 50	4 73	1,095 62	1 48	29,411 98	39 80
50 00	06	-	-	-	-	18,555 34	23 02
100 00	13	576 00	76	46 19	06	18,874 17	24 83
161 25	37	27 00	06	863 75	1 99	15,585 95	36 00
98 00	12	-	-	290 31	37	19,939 52	25 08
150 00	27	3,312 25	5 88	149 88	27	19,777 81	35 13
75 00	13	1,525 17	2 69	53 60	09	18,630 57	32 92
150 00	21	1,411 20	1 95	387 55	54	24,157 72	33 41
102 31	17	938 20	1 54	576 52	95	20,281 81	33 25
46 60	07	1,852 60	2 90	4 47	01	16,610 50	25 99
100 00	40	1,152 50	4 59	2,254 07	8 98	10,481 85	41 76
200 00	28	222 00	31	427 10	59	26,019 10	35 79
210 00	30	490 50	69	392 04	55	27,996 68	39 60
136 00	32	3,480 83	8 15	335 34	78	20,975 34	49 12
100 00	18	538 20	98	1,921 75	3 49	15,090 82	27 44
15 00	06	225 00	87	225 96	87	9,580 47	37 13
110 00	19	955 00	1 62	4,183 13	7 08	21,405 60	36 22
75 00	12	779 00	1 21	890 16	1 38	18,304 79	28 34
100 00	18	1,453 00	2 62	298 35	54	18,219 72	32 89
75 00	12	1,730 50	2 80	635 17	1 03	21,262 84	34 41
374 50	60	3,966 67	6 34	-	-	32,896 77	52 56
-	-	432 00	1 15	-	-	10,782 57	28 68
50 00	14	1,737 60	4 73	450 19	1 23	13,515 70	36 83
222 40	36	656 80	1 07	88 90	15	30,128 97	49 31
100 00	21	424 00	87	35 96	07	14,403 80	29 70
84 55	18	953 51	2 02	216 11	46	18,503 80	39 20
117 00	25	1,311 00	2 81	331 40	71	18,070 79	38 70
114 55	27	2,203 85	5 31	656 25	1 58	17,629 20	42 48
85 00	19	2,265 00	4 96	171 87	38	17,628 65	38 57
-	-	10 20	02	-	-	12,443 45	24 93
50 00	10	390 00	75	106 62	21	12,194 74	23 59
100 00	21	85 50	18	96 93	21	13,444 23	28 73
100 00	21	1,657 00	3 44	18 50	04	16,608 08	34 53
25 00	05	1,560 00	3 29	-	-	14,249 52	30 06
70 00	14	1,443 75	2 95	120 84	25	13,125 65	26 84

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
104	Hingham,	\$31,882 80	\$2,208 51	\$34,091 31
105	Ludlow,	-	109 57	109 57
106	Lexington,	55,000 00	-	55,000 00
107	South Hadley,	204 77	8 00	212 77
108	Walpole,	496 44	-	496 44
109	Canton,	482 00	771 64	1,253 64
110	Monson,	-	368 02	368 02
111	Millbury,	-	-	-
112	Barnstable,	19,806 79	-	19,806 79
113	Uxbridge,	29,834 70	-	29,834 70
114	Dartmouth,	1,745 00	-	1,745 00
115	Provincetown,	1,775 46	-	1,775 46
116	Randolph,	-	369 15	369 15
117	Dudley,	1,866 45	3,221 07	5,087 52
118	Rockport,	-	39 60	39 60
119	Warren,	-	-	-
120	Lee,	-	-	-
121	Wareham,	2,726 87	-	2,726 87
122	Foxborough,	-	103 96	103 96
123	Templeton,	-	665 90	665 90
124	Tewksbury,	-	-	-
125	Williamstown,	708 97	108 00	816 97
126	Dalton,	-	-	-
127	Hardwick,	16,074 38	709 55	16,783 93
128	Agawam,	19,493 52	527 68	20,021 20
129	Medfield,	212 66	152 24	364 90
130	Dracut,	-	-	-
131	East Bridgewater,	35,561 00	1,937 50	37,498 50
132	Oxford,	-	-	-
133	Leicester,	-	-	-
134	Falmouth,	6,762 56	-	6,762 56
135	Sutton,	-	-	-
136	North Brookfield,	-	160 00	160 00
137	Lenox,	11,099 42	270 37	11,369 79
138	Nantucket,	500 00	-	500 00
139	Barre,	-	-	-
140	Pepperell,	-	-	-
141	Westport,	7,612 61	777 14	8,389 75
142	Westford,	-	-	-
143	Holbrook,	1,469 36	131 54	1,600 90
144	Somerset,	-	-	-
145	Ayer,	-	139 79	139 79
146	Billerica,	-	-	-
147	Holliston,	999 37	771 01	1,770 38
148	Medway,	-	42 70	42 70

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING TOWN FISCAL YEAR.		Expenditures for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 26, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$29,143 17	\$2,167 30	\$10,863 72	\$100 00	-	-
29,179 78	360 50	5,339 42	-	-	-
41,000 00	1,111 15	16,356 80	-	-	-
25,460 13	1,457 71	4,825 18	-	-	-
35,318 22	728 75	8,797 34	500 00	-	-
25,635 85	203 00	7,759 34	-	-	-
17,755 51	2,731 38	4,242 72	122 43	\$1,220 05	-
24,061 04	687 50	5,335 05	-	-	-
33,150 56	613 82	10,397 30	-	-	-
20,501 92	2,160 52	5,672 55	-	-	-
28,926 14	80 80	3,099 55	-	-	-
16,920 45	1,701 23	2,955 25	-	877 55	-
16,729 93	1,563 72	5,517 71	-	-	-
13,144 20	1,811 22	2,977 61	-	1,220 05	-
19,550 86	-	5,179 47	19 32	-	-
16,867 73	3,186 94	6,337 50	-	1,145 05	-
15,975 74	2,210 28	4,846 51	-	877 55	-
23,818 97	338 75	7,075 85	-	-	-
16,771 73	1,669 29	5,143 34	28 15	-	-
13,595 29	2,065 55	4,110 91	-	952 55	-
8,351 28	2,824 46	-	100 00	1,220 05	-
24,872 48	685 47	7,149 78	-	-	-
26,376 93	57 00	6,085 25	-	-	-
20,387 53	1,278 00	7,525 28	15 00	-	-
13,682 87	1,620 68	-	-	877 55	\$220 87
7,070 86	1,825 64	2,845 51	25 00	792 04	-
20,891 75	879 02	-	75 00	-	-
15,589 79	2,056 67	3,699 92	-	877 55	245 81
16,692 28	1,970 80	4,789 87	1 00	1,145 05	1 55
18,263 43	1,665 88	5,394 16	-	1,145 05	-
30,970 14	549 22	10,146 52	-	-	-
8,834 05	1,927 74	1,827 48	20 78	952 55	-
10,659 98	2,599 55	4,157 69	-	1,220 05	-
30,393 83	700 00	8,873 62	-	-	-
15,255 85	-	3,147 44	-	-	-
15,673 81	2,270 73	5,712 33	151 00	-	-
16,931 93	1,889 05	4,426 14	-	1,145 05	-
14,970 87	1,607 10	528 00	-	877 55	-
14,413 90	1,781 22	3,696 24	-	1,145 05	1,145 05
10,479 62	1,545 22	2,613 26	500 00	952 55	210 65
9,675 49	1,432 42	2,557 12	-	1,220 05	133 70
11,590 51	1,557 11	4,685 23	-	877 55	75 83
15,348 72	471 17	-	-	-	-
13,254 62	1,710 62	2,933 19	-	792 04	-
10,900 23	2,037 77	3,340 52	-	952 55	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in towns between 5 and 16 years of age.	Number of persons in towns between 7 and 14 years of age.
149	Manchester, . . .	2,673	\$16,054,239	13	414	286
150	Cohasset, . . .	2,585	9,505,041	11	457	313
151	Norton, . . .	2,544	1,504,350	10	406	277
152	Scituate, . . .	2,482	5,132,004	12	429	321
153	Bourne, . . .	2,474	7,203,725	14	390	298
154	Lancaster, . . .	2,464	5,351,421	12	416	285
155	Hopkinton, . . .	2,452	1,756,502	12	411	278
156	Kingston, . . .	2,445	1,650,460	13	450	338
157	Auburn, . . .	2,420	1,385,000	17	632	508
158	Seekonk, . . .	2,397	1,589,435	14	486	360
159	Wilbraham, . . .	2,332	1,178,166	12	306	218
160	Hanover, . . .	2,326	1,595,220	10	340	251
161	Sharon, . . .	2,310	3,218,118	10	422	324
162	Groveland, . . .	2,253	1,216,595	12	401	298
163	Dighton, . . .	2,235	1,319,639	13	416	319
164	West Bridgewater, . . .	2,231	1,534,588	15	495	345
165	Deerfield, . . .	2,209	2,349,851	14	454	336
166	Wayland, . . .	2,206	3,177,080	11	334	236
167	Brookfield, . . .	2,204	1,353,506	14	377	289
168	Merrimac, . . .	2,202	1,339,714	10	295	214
169	Hopedale, . . .	2,188	5,913,632	12	341	243
170	Groton, . . .	2,155	4,112,979	10	302	214
171	Douglas, . . .	2,152	1,378,758	11	428	324
172	Holden, . . .	2,147	1,781,958	16	459	326
173	Shirley, . . .	2,139	1,254,941	7	350	244
174	Acton, . . .	2,136	2,425,330	11	309	212
175	Williamsburg, . . .	2,132	1,080,869	14	319	248
176	Harwich, . . .	2,115	1,487,644	12	321	213
177	Ashburnham, . . .	2,107	1,220,425	11	327	235
178	Weston, . . .	2,106	8,399,725	11	309	237
179	Hull, . . .	2,103	7,598,083	9	250	179
180	Upton, . . .	2,071	1,185,546	9	315	222
181	Belchertown, . . .	2,054	933,765	15	378	285
182	Charlton, . . .	2,032	1,305,988	15	334	257
183	Avon, . . .	2,013	1,036,751	10	447	318
184	Rehoboth, . . .	2,001	964,489	15	400	310
185	Hadley, . . .	1,999	1,743,841	12	416	269
186	Hatfield, . . .	1,986	1,636,230	11	347	261
187	Swansea, . . .	1,978	1,655,270	13	405	319
188	Georgetown, . . .	1,958	1,245,032	8	367	260
189	Sturbridge, . . .	1,957	1,019,130	11	313	246
190	Shrewsbury, . . .	1,946	2,401,257	13	340	303
191	Stockbridge, . . .	1,933	4,534,440	11	316	224
192	Dennis, . . .	1,919	1,326,680	12	225	153
193	Wilmington, . . .	1,858	1,709,327	13	406	318

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 5 years of age.	Number of different pupils within the year over 15 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
524	—	77	281	478	—	441	92	26
490	1	79	313	466	—	406	88	30
442	—	44	265	414	—	387	94	27
507	3	68	299	450	—	419	93	30
438	—	50	328	407	—	382	94	27
328	—	36	235	291	—	271	93	16
415	—	56	301	402	—	384	96	31
492	2	40	337	461	—	438	95	22
558	—	6	459	502	18	461	92	16
487	—	7	367	423	35	383	90	22
239	1	5	197	215	30	201	93	15
375	1	43	250	347	—	325	94	28
423	—	52	261	381	—	351	93	23
455	—	71	295	404	—	382	95	36
398	—	8	296	373	22	346	93	19
471	—	7	354	455	—	426	94	32
396	4	4	310	372	—	336	90	17
372	—	68	219	351	—	333	95	28
354	—	27	255	338	—	310	92	14
353	—	57	225	335	—	314	94	25
418	25	64	242	369	—	347	94	20
325	—	55	204	293	—	273	93	23
391	—	22	283	352	—	330	94	9
506	—	50	362	440	—	401	91	21
208	—	22	141	196	—	178	91	9
323	1	7	231	292	51	270	92	26
380	2	50	279	369	3	346	94	20
327	—	62	213	288	—	259	90	18
320	—	3	259	298	—	270	91	25
335	4	49	211	319	—	303	95	29
233	—	9	272	218	37	194	89	24
338	2	53	235	319	—	295	93	29
389	—	47	285	360	—	332	92	9
333	—	13	249	288	—	263	91	6
467	—	24	323	421	—	396	94	31
381	—	6	310	337	16	307	91	8
385	—	45	258	371	—	331	89	15
348	—	3	268	330	—	294	89	10
427	6	6	313	373	36	324	87	19
300	—	5	233	277	—	247	89	26
284	—	2	235	253	4	235	93	5
369	4	47	227	326	—	292	90	15
317	—	53	201	300	—	280	94	12
265	—	40	173	240	—	227	94	15
472	—	53	304	436	—	395	91	33

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
149	Manchester,	3	16	2	6	9	9-14	
150	Cohasset,	3	16	-	4	9	8-18	
151	Norton,	-	15	-	2	3	9-7	
152	Scituate,	1	14	1	4	3	9-15	
153	Bourne,	3	14	1	3	11	8-15	
154	Lancaster,	2	19	-	4	7	9-10	
155	Hopkinton,	-	15	-	1	4	9-7	
156	Kingston,	1	17	-	3	11	9-8	
157	Auburn,	-	17	-	-	10	8-16	
158	Seekonk,	1	13	-	-	3	8-18	
159	Wilbraham,	-	12	-	-	9	9-4	
160	Hanover,	2	10	2	3	5	9-9	
161	Sharon,	2	12	1	4	6	9-13	
162	Groveland,	1	14	-	3	10	8-17	
163	Dighton,	-	14	-	-	8	8-17	
164	West Bridgewater,	-	15	-	-	11	9-4	
165	Deerfield,	-	15	1	-	9	8-16	
166	Wayland,	2	12	-	4	8	9-11	
167	Brookfield,	1	14	2	2	6	8-18	
168	Merrimac,	1	11	-	3	4	9-7	
169	Hopedale,	2	13	1	3	3	8-19	
170	Groton,	1	12	-	3	3	8-15	
171	Douglas,	1	12	-	2	3	9	
172	Holden,	3	19	-	3	17	9	
173	Shirley,	-	9	-	2	6	9-8	
174	Acton,	-	11	2	1	6	9-6	
175	Williamsburg,	2	13	-	3	5	9-1	
176	Harwich,	2	13	-	3	8	8-7	
177	Ashburnham,	-	11	-	-	5	8-13	
178	Weston,	2	12	-	4	5	9	
179	Hull,	2	7	2	-	7	9-10	
180	Upton,	1	10	-	3	8	8-14	
181	Belchertown,	2	15	-	3	6	8-19	
182	Charlton,	1	17	-	2	4	8-12	
183	Avon,	2	10	-	2	7	9-7	
184	Rehoboth,	-	15	-	-	1	8-17	
185	Hadley,	3	13	-	5	1	8-5	
186	Hatfield,	-	11	-	-	6	8-14	
187	Swansea,	-	13	-	-	2	8-14	
188	Georgetown,	-	8	-	-	8	8-15	
189	Sturbridge,	-	11	-	-	1	9-1	
190	Shrewsbury,	1	14	-	2	4	8-18	
191	Stockbridge,	1	15	-	3	8	9-11	
192	Dennis,	3	10	1	3	5	8-18	
193	Wilmington,	1	15	-	3	10	9-15	

¹ Howard Seminary.² Deerfield Academy and Dickinson High School.

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

HIGH SCHOOLS.

Number of high schools.	Length of high school year.	Number of teachers.	NUMBER OF PUPILS.		NUMBER OF PUPILS ADMITTED TO THE FRESHMAN CLASS.		NUMBER OF GRADUATES.	
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1	9-16	6	42	59	8	15	4	8
1	9-18	5	38	42	17	19	8	13
1	9-14	3	20	42	8	7	2	11
1	9-17	4	22	59	11	18	6	3
1	9-14	4	24	29	10	9	4	5
1	9-15	4	22	31	10	8	2	3
1	9-15	4	39	46	16	11	2	8
1	9-18	4	28	48	8	16	8	3
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
1	9-14	3	33	38	11	13	1	12
1	9-14	5	38	42	17	9	4	15
1	9-15	4	41	45	12	15	3	6
-	-	-	-	-	-	-	-	-
1 ¹	8-10	6	35	44	14	20	6	2
1 ²	8-16	6	47	56	22	15	6	15
1	10	4	34	36	10	9	3	8
1	9-15	2	20	16	8	7	1	2
1	9-17	4	37	53	12	12	7	18
1	9-14	3	32	24	12	10	2	3
1	9-7	4	38	39	11	8	10	9
1	9-16	2	15	15	5	5	-	-
1	10	3	26	35	11	11	5	9
1	9-18	2	18	19	9	7	1	2
1	9-10	1	13	22	13	22	-	-
1	10	2	24	37	11	12	4	8
1	9-7	3	30	28	11	9	6	1
1 ³	9-14	14	17	27	4	3	2	6
1	9	4	33	31	10	10	8	4
-	-	-	-	-	-	-	-	-
1	9-8	3	30	39	7	15	4	7
1	9-18	3	17	26	5	5	3	5
1	10	2	12	14	8	10	3	2
1	9-16	3	22	42	12	22	1	6
-	-	-	-	-	-	-	-	-
1 ⁴	9-11	4	15	30	5	6	4	6
-	-	-	-	-	-	-	-	-
1 ⁵	10-1	4	30	46	8	20	4	13
-	-	-	-	-	-	-	-	-
1	9-18	3	18	34	13	11	-	5
1	9-11	4	16	48	7	15	1	5
1	9-16	3	21	30	6	10	4	3
1	9-18	4	43	29	22	13	5	2

¹ Cushing Academy.⁴ Hopkins Academy.⁵ Parley Free School.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
149	Manchester,	478	\$100 00	\$0 21	\$80 59	\$0 17
150	Cohasset,	466	149 00	32	140 49	30
151	Norton,	414	36 66	09	116 36	28
152	Scituate,	450	250 00	56	—	—
153	Bourne,	407	182 17	45	27 74	07
154	Lancaster,	291	—	—	184 79	64
155	Hopkinton,	402	—	—	5 00	01
156	Kingston,	461	123 00	27	26 50	06
157	Auburn,	502	170 00	34	57 99	12
158	Seekonk,	423	100 00	24	10 00	02
159	Wilbraham,	215	132 50	62	55 28	26
160	Hanover,	347	130 00	37	24 21	07
161	Sharon,	381	50 00	13	87 89	23
162	Groveland,	404	140 00	35	17 29	04
163	Dighton,	373	—	—	—	—
164	West Bridgewater,	455	121 00	26	43 78	10
165	Deerfield,	372	75 00	20	23 95	06
166	Wayland,	351	160 00	46	16 06	05
167	Brookfield,	338	145 00	43	36 36	11
168	Merrimac,	335	100 00	30	52 37	16
169	Hopedale,	369	—	—	—	—
170	Groton,	293	50 00	17	134 52	46
171	Douglas,	352	50 00	14	25 00	07
172	Holden,	440	75 00	17	3 92	01
173	Shirley,	196	90 00	46	22 77	12
174	Acton,	292	102 50	35	9 83	03
175	Williamsburg,	369	225 00	61	—	—
176	Harwich,	288	135 00	47	44 05	15
177	Ashburnham,	298	—	—	47 80	16
178	Weston,	319	450 00	1 41	150 22	47
179	Hull,	218	215 00	99	380 40	1 74
180	Upton,	319	—	—	26 48	08
181	Belchertown,	360	85 00	24	—	—
182	Charlton,	288	90 00	31	80 62	28
183	Avon,	421	100 00	24	7 42	02
184	Rehoboth,	337	100 00	30	13 67	04
185	Hadley,	371	45 00	12	39 50	11
186	Hatfield,	330	60 00	18	18 63	06
187	Swansea,	373	115 00	31	51 03	14
188	Georgetown,	277	75 00	27	26 25	09
189	Sturbridge,	253	108 10	43	22 00	09
190	Shrewsbury,	326	165 00	51	1 12	—
191	Stockbridge,	300	50 00	17	41 74	14
192	Dennis,	240	100 00	42	31 90	13
193	Wilmington,	436	150 00	34	2 70	—

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$1,000 00	\$2 09	\$44 31	\$0 09	\$1,725 00	\$3 61	-	-
520 00	1 12	125 19	27	1,573 00	3 37	-	-
495 00	1 20	33 52	08	516 00	1 25	-	-
566 60	1 26	-	-	325 00	72	-	-
740 57	1 82	130 66	32	-	-	-	-
1,000 00	3 44	65 96	23	-	-	-	-
900 00	2 24	89 84	22	635 00	1 58	\$21 83	\$0 05
660 00	1 43	42 13	09	600 00	1 30	-	-
750 00	1 50	25 60	05	-	-	-	-
600 00	1 42	-	-	112 52	27	17 00	04
600 00	2 79	114 32	53	421 80	1 96	24 62	11
539 98	1 56	5 85	02	-	-	-	-
382 00	1 00	1 00	-	-	-	-	-
680 00	1 68	23 09	06	-	-	-	-
639 96	1 72	23 16	06	-	-	-	-
449 08	99	-	-	-	-	-	-
704 78	1 89	43 72	12	420 00	1 13	7 00	02
800 00	2 28	33 83	10	900 00	2 56	-	-
762 50	2 26	57 12	17	-	-	-	-
595 00	1 78	22 25	07	235 00	70	-	-
716 60	1 94	12 21	03	-	-	-	-
500 00	1 71	30 24	10	-	-	-	-
673 30	1 91	-	-	-	-	-	-
849 96	1 93	61 69	14	-	-	-	-
300 00	1 53	21 35	11	515 75	2 63	-	-
565 71	1 94	23 55	08	-	-	-	-
750 00	2 03	-	-	-	-	-	-
776 76	2 70	43 25	15	279 99	97	-	-
717 98	2 41	17 28	06	112 00	38	-	-
197 86	62	19 31	06	-	-	-	-
410 00	1 88	70 80	32	600 00	2 75	-	-
485 66	1 52	36 17	11	337 25	1 06	-	-
1,080 00	2 80	-	-	-	-	-	-
791 66	2 75	55	-	186 00	65	43 50	15
441 60	1 05	4 80	01	-	-	-	-
639 96	1 90	7 19	02	-	-	-	-
660 55	1 78	31 43	08	202 50	54	-	-
605 49	1 83	27 72	08	200 00	61	-	-
600 00	1 61	3 91	01	-	-	-	-
406 00	1 47	36 86	13	-	-	-	-
625 33	2 47	2 50	01	190 00	75	40 50	16
509 42	1 56	7 92	02	450 00	1 38	144 00	44
1,512 00	5 04	88 63	30	-	-	-	-
816 00	3 40	70 10	29	325 00	1 35	136 47	57
640 00	1 47	12 44	03	415 00	95	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principals' salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
149	Manchester,	\$2,910 32	\$6 09	\$11,658 17	\$24 39
150	Cohasset,	1,900 00	4 08	10,476 25	22 48
151	Norton,	1,999 47	4 83	5,280 40	12 75
152	Scituate,	2,850 00	6 33	7,005 00	15 57
153	Bourne,	2,910 00	7 15	8,647 43	21 25
154	Lancaster,	1,400 00	4 81	8,891 00	30 55
155	Hopkinton,	1,519 08	3 78	6,475 08	16 11
156	Kingston,	1,100 00	2 39	6,703 00	14 54
157	Auburn,	1,751 00	3 49	4,841 50	9 64
158	Seekonk,	-	-	5,647 80	13 35
159	Wilbraham,	1,064 00	4 95	4,005 00	18 63
160	Hanover,	1,100 00	3 17	5,807 75	16 74
161	Sharon,	3,050 00	8 01	7,013 75	18 41
162	Groveland,	1,600 00	3 96	6,419 37	15 89
163	Dighton,	-	-	6,017 16	16 13
164	West Bridgewater,	1,089 59	2 39	6,527 23	14 35
165	Deerfield,	990 00	2 66	5,336 90	14 35
166	Wayland,	2,300 00	6 55	7,200 00	20 51
167	Brookfield,	1,000 00	2 96	6,087 87	18 01
168	Merrimac,	1,100 00	3 28	4,980 70	14 87
169	Hopedale,	2,402 50	6 51	7,698 93	20 86
170	Groton,	1,050 00	3 58	6,664 00	22 74
171	Douglas,	900 00	2 56	4,844 00	13 76
172	Holden,	1,200 00	2 73	8,306 25	18 88
173	Shirley,	1,300 00	6 64	2,795 00	14 27
174	Acton,	-	-	9,050 54	30 99
175	Williamsburg,	1,350 00	3 66	5,239 30	14 20
176	Harwich,	1,112 50	3 86	5,695 92	19 08
177	Ashburnham,	2,526 30	8 48	3,254 00	10 92
178	Weston,	2,049 97	6 43	10,039 21	31 47
179	Hull,	2,155 00	9 89	3,784 75	17 36
180	Upton,	1,874 00	5 87	3,134 00	9 82
181	Belchertown,	1,468 00	4 08	5,335 18	14 82
182	Charlton,	1,417 00	4 92	5,116 13	17 76
183	Avon,	1,080 00	2 57	5,221 60	12 40
184	Rehoboth,	-	-	4,781 00	14 01
185	Hadley,	1,200 00	3 23	7,491 75	20 19
186	Hatfield,	-	-	4,601 60	13 94
187	Swansea,	-	-	5,040 00	13 51
188	Georgetown,	-	-	4,300 00	15 52
189	Sturbridge,	1,254 00	4 96	2,926 00	11 57
190	Shrewsbury,	1,165 00	3 57	6,052 00	18 56
191	Stockbridge,	2,280 00	7 60	8,149 50	27 17
192	Dennis,	-	-	6,554 25	27 31
193	Wilmington,	1,200 00	2 75	7,506 51	17 22

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$654 57	\$1 37	\$335 93	\$1 75	\$1,631 24	\$3 41	\$1,385 07	\$2 90
811 21	1 74	741 85	1 59	1,024 30	2 20	1,293 09	2 77
424 25	1 02	523 35	1 26	847 80	2 05	888 96	2 15
446 16	99	797 34	1 77	1,440 00	3 20	835 75	1 86
1,027 17	2 52	203 49	50	1,349 46	3 31	1,045 82	2 57
259 75	89	501 69	1 72	1,244 00	4 27	1,041 62	3 58
153 20	38	499 92	1 24	980 00	2 44	926 17	2 30
414 18	90	473 78	1 03	1,551 44	3 37	905 79	1 96
303 62	60	310 17	62	875 50	1 74	715 88	1 43
328 77	78	310 34	78	821 00	1 94	419 37	99
82 44	38	340 85	1 59	697 25	3 24	754 69	3 51
254 92	73	398 09	1 15	608 25	1 75	417 79	1 20
592 66	1 56	1,124 52	2 95	1,157 25	3 04	1,325 96	3 48
421 05	1 04	312 11	77	852 35	2 11	475 12	1 18
135 89	36	322 76	87	665 00	1 78	538 89	1 44
473 97	1 04	219 49	48	806 68	1 77	753 67	1 66
60 37	16	253 50	68	753 59	2 03	496 38	1 33
460 32	1 31	655 89	1 87	950 00	2 71	1,168 83	3 33
500 19	1 48	349 45	1 03	690 94	2 04	979 57	2 90
229 24	68	146 89	44	760 80	2 27	959 99	2 86
378 68	1 03	621 24	1 68	1,302 67	3 53	1,544 25	4 18
429 12	1 46	334 13	1 14	732 00	2 50	1,148 85	3 92
759 28	2 16	186 03	53	648 00	1 84	934 33	2 65
402 85	92	698 00	1 59	1,215 81	2 76	1,038 31	2 36
166 10	85	252 23	1 29	517 30	2 64	913 60	4 66
291 08	99	249 49	85	1,246 20	4 27	484 69	1 66
334 07	91	174 13	47	561 96	1 52	599 28	1 62
256 44	89	488 41	1 70	598 50	2 08	416 34	1 45
311 21	1 04	97 54	33	591 26	1 98	804 37	2 70
566 51	1 78	968 59	3 04	1,529 92	4 80	1,801 53	5 65
208 00	95	482 40	2 21	1,560 00	7 16	694 53	3 19
242 90	76	374 30	1 17	720 00	2 26	1,323 91	4 15
440 06	1 22	360 76	1 00	304 22	84	678 67	1 89
173 07	60	216 49	75	249 75	87	472 12	1 64
373 04	89	453 32	1 08	788 50	1 87	1,344 75	3 19
209 26	62	185 68	55	243 30	72	232 50	69
322 68	87	746 80	2 01	883 50	2 38	894 97	2 41
330 55	1 00	243 93	74	701 43	2 13	936 36	2 84
137 71	37	142 81	38	781 25	2 10	730 21	1 96
227 91	82	171 45	62	550 00	1 99	397 01	1 43
148 26	59	187 93	74	382 80	1 51	487 20	1 93
328 67	1 01	335 20	1 03	726 00	2 23	744 45	2 28
593 04	1 98	436 40	1 46	1,314 25	4 38	897 30	2 99
348 02	1 45	363 50	1 52	554 66	2 31	446 07	1 86
491 20	1 13	552 13	1 27	1,037 00	2 38	838 87	1 92

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
		Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
149	Manchester, . . .	\$223 34	\$0 47	\$2,137 47	\$4 47	-	-
150	Cohasset, . . .	253 82	54	904 12	1 94	-	-
151	Norton, . . .	47 84	12	506 48	1 22	-	-
152	Scituate, . . .	-	-	551 12	1 22	-	-
153	Bourne, . . .	1,396 47	3 43	3,595 25	8 83	-	-
154	Lancaster, . . .	253 17	87	56 80	19	-	-
155	Hopkinton, . . .	228 47	57	1,073 75	2 67	-	-
156	Kingston, . . .	126 48	27	446 58	97	-	-
157	Auburn, . . .	24 90	05	552 03	1 10	-	-
158	Seekonk, . . .	124 54	29	249 96	59	-	-
159	Wilbraham, . . .	-	-	189 84	88	-	-
160	Hanover, . . .	211 42	61	680 48	1 96	-	-
161	Sharon, . . .	121 59	32	867 55	2 28	-	-
162	Groveland, . . .	161 38	40	297 03	74	-	-
163	Dighton, . . .	25 00	07	274 19	74	-	-
164	West Bridgewater, . . .	143 28	31	779 00	1 71	-	-
165	Deerfield, . . .	30 00	08	134 70	36	-	-
166	Wayland, . . .	213 43	61	523 92	1 49	-	-
167	Brookfield, . . .	147 47	44	327 26	97	-	-
168	Merrimac, . . .	41 06	12	353 07	1 05	-	-
169	Hopedale, . . .	278 25	75	144 72	39	-	-
170	Groton, . . .	88 39	30	321 67	1 10	-	-
171	Douglas, . . .	-	-	381 38	1 08	-	-
172	Holden, . . .	185 83	42	876 15	1 99	-	-
173	Shirley, . . .	62 15	32	100 20	51	-	-
174	Acton, . . .	129 08	44	599 02	2 05	-	-
175	Williamsburg, . . .	396 98	1 07	543 79	1 47	-	-
176	Harwich, . . .	341 90	1 18	587 22	2 04	-	-
177	Ashburnham, . . .	41 10	14	199 79	67	-	-
178	Weston, . . .	471 45	1 48	1,625 75	5 10	\$21 75	\$0 07
179	Hull, . . .	-	-	1,123 49	5 15	-	-
180	Upton, . . .	43 95	14	204 45	64	-	-
181	Belchertown, . . .	-	-	546 04	1 52	-	-
182	Charlton, . . .	51 77	18	302 17	1 05	-	-
183	Avon, . . .	101 58	24	326 71	78	-	-
184	Rehoboth, . . .	31 01	09	683 54	2 03	-	-
185	Hadley, . . .	197 59	53	3,431 28	9 25	-	-
186	Hatfield, . . .	17 06	05	1,156 39	3 50	-	-
187	Swansea, . . .	10 35	03	238 56	64	-	-
188	Georgetown, . . .	61 85	22	372 64	1 35	-	-
189	Sturbridge, . . .	4 18	02	551 45	2 18	-	-
190	Shrewsbury, . . .	98 35	30	839 32	2 57	-	-
191	Stockbridge, . . .	335 04	1 12	257 28	86	-	-
192	Dennis, . . .	-	-	378 73	1 58	-	-
193	Wilmington, . . .	105 10	24	474 03	1 09	-	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditure for the support of public schools, being the total of items in the fifteen preceding columns.	Cost per pupil in average membership.
\$54 00	\$0 11	\$1,161 00	\$2 43	\$344 84	\$0 72	\$25,945 85	\$54 28
110 80	24	3,534 75	7 59	241 01	52	23,793 88	51 07
50 00	12	1,111 00	2 68	34 78	08	12,911 87	31 19
75 00	17	3,666 00	8 15	—	—	18,807 97	41 80
200 00	49	1,916 51	4 71	136 37	34	23,509 11	57 76
288 30	99	1,657 55	5 70	—	—	16,844 63	57 89
—	—	1,461 90	3 63	120 70	30	15,089 94	37 54
150 00	33	640 50	1 39	22 20	05	13,985 58	30 34
75 00	15	187 70	37	1,419 69	2 83	12,060 58	24 03
110 00	26	80 00	19	1,932 90	4 57	10,864 20	25 68
100 50	47	198 00	92	2,983 50	13 87	11,764 59	54 71
25 00	07	751 50	2 16	63 65	18	11,018 89	31 75
91 50	24	2,016 50	5 29	244 11	64	18,126 28	47 58
—	—	—	—	27 21	07	11,426 00	28 28
35 00	09	548 75	1 47	1,428 75	3 83	10,654 51	28 56
71 00	15	1,196 82	2 63	49 25	11	12,723 84	27 96
57 50	15	2,843 65	7 64	135 75	36	12,366 79	33 24
50 00	14	2,758 00	7 86	65 52	19	18,255 80	52 01
50 00	15	68 40	20	—	—	11,202 13	33 14
50 00	15	469 17	1 40	5 91	02	10,101 45	30 15
21 50	06	415 00	1 12	255 88	69	15,792 43	42 80
—	—	1,359 00	4 64	21 82	07	12,863 74	43 91
50 00	14	555 50	1 58	221 09	63	10,227 91	29 06
50 00	11	692 56	1 57	—	—	15,656 33	35 58
50 00	26	1,652 75	8 43	—	—	8,759 20	44 69
85 00	29	3,748 70	12 84	—	—	16,585 39	56 80
101 75	28	641 00	1 73	198 52	54	11,115 78	30 12
20 00	07	958 00	3 33	—	—	11,754 28	40 81
—	—	509 35	1 71	61 24	21	9,291 22	31 18
300 00	94	4,944 92	15 50	64 47	20	25,201 46	79 00
200 00	92	3,026 50	13 88	386 86	1 77	15,297 73	70 17
—	—	1,511 75	4 74	—	—	10,314 82	32 33
25 00	07	553 20	1 54	98 36	27	10,974 49	30 48
—	—	160 50	56	597 85	2 08	9,949 18	34 55
80 00	19	304 00	72	89 16	21	10,716 48	25 45
—	—	—	—	442 25	1 31	7,569 36	22 46
112 63	30	1,294 10	3 49	45 00	12	17,599 28	47 45
—	—	232 06	70	—	—	9,131 22	27 67
50 00	13	250 00	67	2,702 96	7 25	10,853 79	29 10
25 00	09	2,090 50	7 55	—	—	8,740 47	31 55
65 00	26	1,989 00	7 86	234 00	92	9,218 25	36 44
105 00	32	427 00	1 31	73 33	22	12,171 78	37 34
50 00	16	1,908 30	6 36	835 88	2 79	18,749 36	62 50
77 25	32	—	—	—	—	10,201 95	42 51
105 25	24	120 00	28	6 86	02	13,657 09	31 32

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
149	Manchester,	\$2 25	\$108 67	\$110 92
150	Cohasset,	460 75	-	460 75
151	Norton,	140 33	-	140 33
152	Scituate,	-	-	-
153	Bourne,	-	-	-
154	Lancaster,	-	-	-
155	Hopkinton,	2,000 00	320 33	2,320 33
156	Kingston,	8,456 74	-	8,456 74
157	Auburn,	1,450 00	-	1,450 00
158	Seekonk,	4,131 87	841 64	4,973 51
159	Wilbraham,	-	-	-
160	Hanover,	-	-	-
161	Sharon,	2,983 70	205 75	3,189 45
162	Groveland,	-	-	-
163	Dighton,	3,670 34	-	3,670 34
164	West Bridgewater,	400 00	-	400 00
165	Deerfield,	11,036 23	54 80	11,091 03
166	Wayland,	2,574 28	42 90	2,617 18
167	Brookfield,	-	-	-
168	Merrimac,	-	-	-
169	Hopedale,	-	205 95	205 95
170	Groton,	166 56	-	166 56
171	Douglas,	3 75	-	3 75
172	Holden,	-	-	-
173	Shirley,	-	-	-
174	Acton,	-	89 80	89 80
175	Williamstown,	-	-	-
176	Harwich,	-	220 72	220 72
177	Ashburnham,	-	349 23	349 23
178	Weston,	204 47	12 00	216 47
179	Hull,	210 40	-	210 40
180	Upton,	-	79 87	79 87
181	Belchertown,	-	-	-
182	Charlton,	-	130 00	130 00
183	Avon,	-	5 75	5 75
184	Rehoboth,	-	-	-
185	Hadley,	-	-	-
186	Hatfield,	-	-	-
187	Swansea,	-	92 92	92 92
188	Georgetown,	-	-	-
189	Sturbridge,	-	-	-
190	Shrewsbury,	4,287 63	212 33	4,499 96
191	Stockbridge,	41,544 02	-	41,544 02
192	Dennis,	-	-	-
193	Wilmington,	227 43	-	227 43

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING TOWN FISCAL YEAR.		Expenditures for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 25, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$25,587 57	-	\$8,715 20	-	-	-
22,949 14	\$79 57	5,224 32	-	-	-
10,080 47	1,942 57	2,793 82	-	\$952 55	\$660 68
18,334 68	-	4,623 46	-	-	-
19,859 29	527 62	8,557 70	-	-	-
17,295 70	23 50	4,995 99	-	-	-
12,733 01	2,424 60	4,287 49	-	952 55	-
11,658 99	1,990 16	3,734 30	-	1,220 05	2 89
9,074 05	2,444 00	-	-	1,220 05	-
7,910 58	2,160 63	-	-	952 55	-
7,284 79	3,014 76	-	-	1,220 05	596 39
9,334 45	1,529 24	2,546 11	-	952 55	-
19,035 00	1,537 16	5,830 51	-	-	-
10,116 90	1,761 08	3,551 39	-	1,220 05	1,221 85
9,209 10	1,683 97	-	-	1,220 05	-
10,142 39	1,930 30	-	-	952 55	56 97
10,260 69	1,961 14	2,000 00	-	1,145 05	-
17,334 63	861 29	5,615 06	-	-	-
8,567 29	2,106 59	1,992 54	-	952 55	-
9,165 12	1,655 55	3,825 77	-	952 55	-
15,805 23	26 00	4,260 00	-	-	-
11,925 96	118 26	4,459 70	-	-	-
7,843 53	2,384 88	1,881 33	-	1,220 05	210 91
12,532 06	2,167 68	3,587 48	-	1,220 05	-
6,312 78	2,337 91	2,224 84	-	952 55	112 76
16,410 78	583 74	5,674 71	-	1,145 05	1,014 96
7,725 29	3,338 35	2,176 30	-	1,220 05	555 24
9,007 90	1,611 83	4,184 71	-	952 55	-
7,548 57	1,323 77	1,500 00	-	952 55	952 52
25,737 24	-	6,437 95	-	-	-
17,158 17	-	-	-	-	-
7,758 99	1,547 55	3,336 01	\$155 24	952 55	-
7,575 79	2,919 45	2,863 90	-	1,370 05	-
7,230 77	1,918 32	1,736 15	-	1,220 06	108 33
7,911 07	2,610 88	2,780 19	-	952 55	-
6,454 76	2,701 85	-	-	1,102 55	-
12,296 05	5,320 88	5,562 16	-	952 55	-
7,133 38	1,726 91	-	-	792 04	-
7,286 40	2,512 40	-	-	952 55	65 90
6,974 72	1,799 51	-	-	952 55	-
9,415 43	1,776 21	630 00	-	1,220 05	-
10,150 00	1,691 44	3,607 12	-	877 55	137 61
18,123 63	317 99	5,497 90	-	-	-
8,670 84	1,531 11	2,533 61	-	1,220 05	1,220 05
11,097 91	2,075 00	4,335 17	-	1,220 05	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in towns between 6 and 16 years of age.	Number of persons in towns between 7 and 14 years of age.
194	Hanson,	1,854	\$1,378,290	10	288	214
195	Sheffield,	1,817	1,076,340	14	269	212
196	Townsend,	1,761	1,347,400	8	303	201
197	Hamilton,	1,749	4,686,430	11	342	269
198	Southborough,	1,745	2,056,563	10	310	208
199	Rutland,	1,743	781,464	7	192	135
200	Wrentham,	1,743	1,401,196	8	218	162
201	Colrain,	1,741	750,480	16	299	247
202	Marshfield,	1,738	2,661,386	8	219	168
203	Raynham,	1,725	886,123	8	239	174
204	Northborough,	1,713	1,416,640	7	304	214
205	Bellingham,	1,696	959,120	10	290	211
206	Acushnet,	1,692	1,007,140	8	365	218
207	Duxbury,	1,688	3,172,073	11	290	214
208	Sandwich,	1,688	1,184,575	10	240	175
209	Ashland,	1,682	1,461,022	9	262	215
210	Carver,	1,663	1,927,482	10	201	160
211	Salisbury,	1,658	1,339,970	9	308	217
212	Northfield,	1,642	1,437,722	10	265	201
213	Essex,	1,621	1,242,421	8	275	195
214	Buckland,	1,573	849,428	9	264	186
215	Chatham,	1,564	1,294,670	9	199	139
216	East Longmeadow,	1,553	925,485	10	336	254
217	Cheshire,	1,508	336,738	8	263	190
218	Shelburne,	1,498	1,297,690	10	192	140
219	Newbury,	1,482	1,567,648	7	208	154
220	Huntington,	1,473	662,780	10	322	219
221	West Newbury,	1,473	1,057,611	7	225	174
222	Freetown,	1,471	994,640	10	268	196
223	Marion,	1,460	5,163,660	7	200	150
224	Sherborn,	1,428	1,611,330	8	181	103
225	Yarmouth,	1,420	2,472,984	9	185	139
226	Norwell,	1,410	1,115,951	8	255	189
227	Millis,	1,399	1,347,735	7	259	194
228	Lunenburg,	1,393	1,336,328	8	231	205
229	Plainville,	1,385	858,554	6	222	180
230	Chester,	1,377	793,565	12	309	239
231	Rowley,	1,368	2,422,011	8	262	199
232	Sterling,	1,359	1,234,655	12	216	146
233	Westminster,	1,353	944,325	12	242	201
234	Pembroke,	1,336	976,345	8	215	173
235	West Brookfield,	1,327	939,477	7	195	137
236	West Stockbridge,	1,271	528,335	7	189	138
237	West Boylston,	1,270	946,489	8	232	165
238	Westwood,	1,266	4,102,590	7	246	172

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 5 years of age.	Number of different pupils within the year over 15 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
293	2	7	219	266	35	249	93	12
363	6	27	247	294	-	270	92	16
342	-	56	226	295	-	271	92	10
384	5	59	234	334	-	314	95	26
334	-	38	193	321	-	297	93	38
236	-	41	191	223	-	202	90	20
256	1	36	165	232	-	207	91	8
321	1	5	264	298	32	271	92	18
259	-	36	220	227	-	212	93	21
239	-	3	189	207	29	189	91	14
309	-	55	200	283	-	256	91	23
278	-	15	199	244	27	225	92	20
302	-	10	213	246	24	206	84	9
307	-	29	219	258	-	245	95	19
274	-	33	197	247	-	233	94	17
379	-	32	241	312	-	297	95	22
225	-	17	156	196	-	173	88	4
285	-	6	221	257	29	236	92	7
325	1	59	201	282	-	264	94	19
288	4	48	166	270	-	254	94	18
242	-	8	181	230	32	216	94	14
214	-	28	143	200	-	186	93	16
398	1	16	291	322	38	302	94	17
253	4	7	186	230	32	208	93	21
292	-	90	161	268	-	250	93	16
209	2	4	143	196	10	179	92	8
320	1	26	243	285	-	267	94	16
256	-	36	164	223	-	199	90	13
284	-	2	242	232	15	213	92	12
204	-	2	158	186	-	176	95	9
257	-	27	169	208	-	191	92	8
221	-	33	139	204	-	196	95	13
296	1	33	188	260	-	242	93	20
278	-	28	193	254	-	237	93	17
235	-	18	164	217	-	201	92	19
238	-	26	155	230	-	215	93	15
375	1	34	239	304	-	277	91	12
252	-	4	201	242	51	222	92	6
226	-	19	146	204	-	184	90	8
235	-	31	175	212	-	195	92	15
244	3	26	166	223	-	207	93	8
173	-	2	142	159	36	148	94	14
122	5	6	111	155	31	143	93	9
259	1	40	178	230	-	217	94	14
215	2	11	144	204	39	192	94	15

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
194	Hanson,	-	10	-	-	6	9-5	
195	Sheffield,	1	14	-	2	3	9-9	
196	Townsend,	1	9	-	3	4	9-2	
197	Hamilton,	1	14	-	3	5	9-6	
198	Southborough,	1	11	1	3	7	9-3	
199	Rutland,	1	7	-	2	6	8-19	
200	Wrentham,	1	12	-	3	5	9-7	
201	Colrain,	-	16	-	-	5	8-19	
202	Marshfield,	2	7	1	2	2	8-18	
203	Raynham,	-	8	-	-	6	9-6	
204	Northborough,	2	8	-	3	4	8-11	
205	Bellingham,	-	10	-	-	5	8-16	
206	Acushnet,	-	8	-	-	7	9-7	
207	Duxbury,	1	12	1	3	1	9-11	
208	Sandwich,	2	10	-	3	7	8-16	
209	Ashland,	1	13	-	3	6	9-3	
210	Carver,	1	10	1	-	9	8-18	
211	Salisbury,	-	9	-	-	2	8-16	
212	Northfield,	1	12	-	3	4	9-2	
213	Essex,	1	10	-	4	2	8-17	
214	Buckland,	-	9	-	-	3	8-16	
215	Chatham,	2	10	-	3	4	8-19	
216	East Longmeadow,	-	10	-	-	7	8-18	
217	Cheshire,	-	8	-	-	4	9-6	
218	Shelburne,	1	14	-	5	5	9-18	
219	Newbury,	-	7	-	-	1	9-3	
220	Huntington,	1	12	-	3	5	9	
221	West Newbury,	2	7	-	3	1	9	
222	Freetown,	-	10	-	-	2	8-17	
223	Marion,	-	7	-	-	6	9-7	
224	Sherborn,	1	8	-	2	7	9-5	
225	Yarmouth,	2	10	1	2	6	8-19	
226	Norwell,	1	9	-	3	3	9-6	
227	Millis,	1	8	-	3	3	9-6	
228	Lunenburg,	1	9	1	2	7	9	
229	Plainville,	1	8	-	2	1	9-5	
230	Chester,	1	13	-	3	10	8-16	
231	Rowley,	-	9	-	-	7	9-5	
232	Sterling,	1	12	-	2	5	8-17	
233	Westminster,	1	12	-	2	5	8-18	
234	Pembroke,	1	8	-	2	-	9-16	
235	West Brookfield,	-	7	-	-	3	8-19	
236	West Stockbridge,	-	7	-	-	5	9-7	
237	West Boylston,	1	10	-	3	5	9-3	
238	Westwood,	2	6	-	-	7	9-14	

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

HIGH SCHOOLS.

Number of high schools.	Length of high school year.	Number of teachers.	NUMBER OF PUPILS.		NUMBER OF PUPILS ADMITTED TO THE FRESHMAN CLASS.		NUMBER OF GRADUATES.	
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
-	-	-	-	-	-	-	-	-
1	9-10	2	17	32	3	8	3	2
1	9-18	3	40	32	9	10	3	4
1	9-17	4	30	28	12	8	3	4
1	9-19	3	24	29	11	9	3	8
1	9-15	2	18	20	9	1	3	3
1	9-16	3	10	33	5	5	3	5
-	-	-	-	-	-	-	-	-
1	9-11	2	22	27	5	6	4	5
-	-	-	-	-	-	-	-	-
1	9-15	3	19	38	7	17	-	6
-	-	-	-	-	-	-	-	-
1 ¹	9-17	3	20	23	5	8	6	3
1	9-15	3	31	19	14	7	3	2
1	9-14	3	22	32	10	9	2	5
1	9-6	2	13	13	4	5	-	3
-	-	-	-	-	-	-	-	-
1	9-15	3	35	41	13	15	1	7
1	9-15	4	29	38	11	13	-	3
-	-	-	-	-	-	-	-	-
1	9-16	3	10	31	3	14	-	6
-	-	-	-	-	-	-	-	-
1	9-14	6	55	55	15	13	8	6
-	-	-	-	-	-	-	-	-
1	9-14	4	8	26	2	5	4	7
1	9-16	3	15	26	4	14	2	1
-	-	-	-	-	-	-	-	-
1 ²	9-5	6	22	25	7	7	1	8
1 ³	9-17	2	30	23	13	7	3	3
1	9-18	2	9	21	3	7	-	3
1	10	3	28	35	5	7	-	7
1	9-14	2	13	20	3	7	2	3
1	9-16	2	18	21	4	6	4	2
1	9-12	3	24	24	10	6	4	2
1	9-15	3	19	29	9	9	2	4
-	-	-	-	-	-	-	-	-
1	9-15	2	8	22	2	11	-	2
1	9-16	2	11	20	9	8	-	-
1	9-16	2	19	19	7	5	4	5
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
1	9-11	2	17	22	6	7	3	7
-	-	-	-	-	-	-	-	-

¹ Partridge Academy.

² Tabor Academy.

³ United with Sawin Academy.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
194	Hanson,	266	\$133 68	\$0 50	\$19 33	\$0 07
195	Sheffield,	294	-	-	-	-
196	Townsend,	295	-	-	-	-
197	Hamilton,	334	95 00	28	18 16	05
198	Southborough,	321	300 00	93	21 82	07
199	Rutland,	223	32 00	14	21 52	10
200	Wrentham,	232	100 00	43	23 85	10
201	Colrain,	298	-	-	9 50	03
202	Marshfield,	227	152 75	66	71 71	32
203	Raynham,	207	120 00	58	27 25	13
204	Northborough,	283	100 00	35	-	-
205	Bellingham,	244	-	-	-	-
206	Acushnet,	246	-	-	50	-
207	Duxbury,	258	65 39	25	97 90	38
208	Sandwich,	247	-	-	72 55	29
209	Ashland,	312	65 00	21	13 70	04
210	Carver,	196	133 00	68	26 46	13
211	Salisbury,	257	166 25	65	24 00	09
212	Northfield,	282	-	-	-	-
213	Essex,	270	60 00	22	108 70	40
214	Buckland,	230	-	-	7 75	03
215	Chatham,	200	225 00	1 13	6 64	03
216	East Longmeadow,	322	92 20	29	20 25	06
217	Cheshire,	230	60 00	26	20 00	09
218	Shelburne,	268	100 00	37	42 36	16
219	Newbury,	196	75 00	38	22 47	11
220	Huntington,	285	75 00	26	16 16	06
221	West Newbury,	223	95 12	43	24 53	11
222	Freetown,	232	120 00	52	20 00	09
223	Marion,	186	205 00	1 10	28 32	15
224	Sherborn,	208	47 15	23	92 99	45
225	Yarmouth,	204	150 00	73	64 91	32
226	Norwell,	260	100 00	38	32 71	13
227	Millis,	254	60 00	24	25 55	10
228	Lunenburg,	217	130 00	60	18 73	09
229	Plainville,	230	120 00	52	-	-
230	Chester,	304	25 00	08	20 00	07
231	Rowley,	242	75 00	31	13 42	06
232	Sterling,	204	60 00	29	25 59	13
233	Westminster,	212	89 85	42	11 83	06
234	Pembroke,	223	80 00	36	25 27	11
235	West Brookfield,	159	65 00	41	20 20	13
236	West Stockbridge,	155	10 00	06	41 23	27
237	West Boylston,	230	150 00	65	38 02	17
238	Westwood,	204	150 00	73	10 00	05

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$539 98	\$2 03	\$19 31	\$0 07	-	-	-	-
832 00	2 83	-	-	-	-	-	-
800 00	2 71	64 37	22	\$552 00	\$1 87	-	-
300 00	90	32 29	10	235 00	70	-	-
509 52	1 59	20 94	07	300 00	93	-	-
477 99	2 14	20 23	09	-	-	-	-
540 00	2 33	20 30	09	-	-	-	-
608 34	2 04	76 72	26	275 84	93	-	-
566 66	2 50	26 50	12	-	-	-	-
477 92	2 31	11 87	06	-	-	-	-
509 42	1 80	31 91	11	400 00	1 41	-	-
616 60	2 53	5 00	02	-	-	-	-
359 41	1 46	28 48	12	85 00	35	-	-
566 60	2 20	6 51	03	-	-	\$1 75	\$0 01
740 57	3 00	99 82	40	350 00	1 42	-	-
610 00	1 95	32 61	10	-	-	-	-
615 50	3 14	26 59	14	-	-	-	-
366 66	1 43	1 40	01	302 50	1 18	-	-
660 00	2 34	-	-	370 00	1 31	3 11	01
531 76	1 97	30 18	11	360 00	1 33	-	-
452 50	1 97	84 59	37	286 39	1 25	4 44	02
565 57	2 83	9 87	05	209 97	1 05	1 64	01
510 49	1 59	21 91	07	424 97	1 32	-	-
262 45	1 14	-	-	-	-	-	-
490 00	1 83	91 83	34	717 67	2 68	-	-
340 00	1 73	11 99	06	117 50	60	-	-
496 68	1 74	5 20	02	-	-	-	-
325 00	1 46	12 10	05	384 50	1 72	-	-
720 00	3 10	15 00	06	500 00	2 16	-	-
680 00	3 66	12 10	07	733 00	3 94	-	-
399 00	1 92	6 73	03	-	-	-	-
612 00	3 00	33 73	16	1,750 00	8 58	-	-
541 66	2 08	12 85	05	-	-	-	-
450 00	1 77	13 35	05	-	-	-	-
480 00	2 21	9 87	05	152 00	70	-	-
330 00	1 44	-	-	-	-	-	-
928 32	3 05	14 14	06	-	-	-	-
340 00	1 41	16 37	07	-	-	-	-
600 00	2 94	31 65	16	271 00	1 33	-	-
600 00	2 83	16 81	08	215 00	1 01	-	-
550 00	2 47	17 48	08	-	-	-	-
467 50	2 94	81 47	51	355 20	2 23	10 50	07
589 50	3 80	77 22	50	-	-	-	-
600 00	2 61	15 28	07	531 00	2 31	-	-
450 00	2 21	2 00	01	175 00	86	16 68	08

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principals' salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
194	Hanson,	\$570 00	\$2 37	\$4,214 00	\$15 84
195	Sheffield,	899 90	3 06	4,998 00	17 00
196	Townsend,	1,000 00	3 39	4,132 58	14 01
197	Hamilton,	1,950 00	5 84	6,644 50	19 89
198	Southborough,	1,200 00	3 74	6,674 56	20 79
199	Rutland,	1,100 00	4 93	2,696 50	12 08
200	Wrentham,	1,100 00	4 74	5,437 76	23 44
201	Colrain,	—	—	5,272 80	17 69
202	Marshfield,	1,716 66	7 56	3,315 00	14 60
203	Raynham,	—	—	3,809 48	18 40
204	Northborough,	1,723 05	6 09	3,509 62	12 40
205	Bellingham,	—	—	4,290 50	17 58
206	Acushnet,	1,229 07	5 00	2,823 08	11 48
207	Duxbury,	2,300 00	8 91	5,050 00	19 06
208	Sandwich,	1,850 00	7 49	3,572 00	14 46
209	Ashland,	1,907 00	6 11	4,409 29	14 13
210	Carver,	892 50	4 55	4,438 30	22 64
211	Salisbury,	—	—	3,448 50	13 42
212	Northfield,	1,000 00	3 55	4,414 00	15 65
213	Essex,	850 10	3 15	4,263 91	15 79
214	Buckland,	—	—	3,712 00	16 14
215	Chatham,	1,050 00	5 25	3,700 75	15 00
216	East Longmeadow,	750 00	2 33	3,926 00	12 19
217	Cheshire,	—	—	3,835 88	16 68
218	Shelburne,	1,400 00	5 22	6,249 03	23 32
219	Newbury,	1,240 00	6 33	2,052 00	10 47
220	Huntington,	1,450 00	5 09	4,509 55	15 82
221	West Newbury,	1,600 00	7 18	3,228 00	14 48
222	Freetown,	—	—	3,992 60	17 21
223	Marion,	—	—	3,818 00	20 53
224	Sherborn,	1,455 50	7 00	3,157 00	15 18
225	Yarmouth,	—	—	5,905 00	28 94
226	Norwell,	1,100 00	4 23	4,435 00	17 06
227	Millis,	900 00	3 54	3,917 70	15 43
228	Lunenburg,	950 00	4 38	4,091 86	18 78
229	Plainville,	1,085 00	4 72	4,454 19	19 37
230	Chester,	1,400 00	4 60	5,082 80	16 72
231	Rowley,	713 29	2 95	3,549 50	14 67
232	Sterling,	900 00	4 41	4,131 90	20 25
233	Westminster,	800 00	3 77	4,085 23	19 27
234	Pembroke,	850 00	3 81	3,903 85	17 51
235	West Brookfield,	556 00	3 50	2,442 00	15 36
236	West Stockbridge,	—	—	3,193 00	20 60
237	West Boylston,	1,800 00	7 82	4,170 23	18 13
238	Westwood,	1,700 00	8 33	3,415 00	16 74

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$108 52	\$0 41	\$138 37	\$0 52	\$422 50	\$1 59	\$279 25	\$1 05
250 68	85	407 08	1 38	408 55	1 39	792 84	2 70
266 06	90	290 24	98	579 79	1 97	599 88	2 03
442 72	1 33	616 86	1 85	905 25	2 71	1,147 37	3 44
253 47	79	587 37	1 83	1,146 50	3 57	871 71	2 71
230 50	1 04	210 50	94	394 00	1 77	672 34	3 01
569 22	2 45	110 00	47	719 50	3 10	735 47	3 17
111 88	37	163 90	55	261 23	88	704 40	2 36
579 21	2 55	135 12	59	229 00	1 02	332 37	1 46
89 46	43	120 28	58	335 65	1 62	233 39	1 13
245 90	87	390 64	1 38	520 44	1 84	433 75	1 53
94 25	39	211 94	87	763 78	3 13	807 00	3 31
188 73	77	137 89	56	562 00	2 28	195 89	80
519 31	2 01	257 63	1 00	496 66	1 92	1,073 00	4 16
256 57	1 04	341 68	1 38	577 65	2 34	522 94	2 12
312 61	1 00	266 10	85	799 92	2 56	597 68	1 92
215 20	1 10	170 82	87	386 30	1 97	304 65	1 55
253 56	99	148 58	58	381 38	1 48	234 49	91
230 32	82	233 45	83	575 06	2 04	829 60	2 94
202 51	75	541 38	2 01	429 58	1 59	1,012 27	3 75
142 79	62	155 20	67	249 35	1 08	411 03	1 79
271 31	1 36	158 78	79	677 00	3 39	392 66	1 96
122 73	38	341 81	1 06	435 09	1 35	973 63	3 02
199 77	87	66 59	29	477 00	2 07	577 12	2 51
597 90	2 23	497 73	1 86	810 50	3 02	859 50	3 21
494 01	2 52	407 93	2 08	807 63	4 12	1,229 16	6 27
52 04	18	158 28	56	552 50	1 94	607 97	2 13
198 62	89	204 04	91	813 25	3 65	878 76	3 94
325 00	1 40	286 33	1 23	334 97	1 44	347 43	1 50
143 33	77	327 35	1 76	475 05	2 55	517 34	2 78
202 96	97	382 38	1 84	805 50	3 87	700 01	3 37
505 90	2 48	455 31	2 23	587 34	2 88	588 13	2 88
358 41	1 38	261 27	1 01	545 00	2 10	280 41	1 08
200 80	79	204 72	81	490 50	1 93	763 05	3 00
252 26	1 16	303 24	1 40	343 00	1 58	631 00	2 91
281 16	1 22	454 43	1 98	629 00	2 74	750 87	3 26
115 52	38	451 34	1 48	450 78	1 48	878 27	2 89
277 38	1 15	99 36	41	280 85	1 16	638 25	2 64
161 45	79	202 92	99	193 75	95	539 75	2 65
163 42	77	213 22	1 01	245 00	1 16	692 85	3 27
323 29	1 45	146 40	66	446 50	2 00	391 54	1 76
97 17	61	317 64	2 00	361 65	2 27	312 12	1 96
55 64	36	168 18	1 09	204 78	1 32	210 97	1 36
203 36	88	277 25	1 21	725 00	3 15	1,045 21	4 54
200 32	98	396 41	1 94	816 63	4 00	738 82	3 62

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
		Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
194	Hanson,	\$31 44	\$0 12	\$303 14	\$1 14	-	-
195	Sheffield,	47 53	16	215 62	73	-	-
196	Townsend,	326 25	1 10	225 52	76	-	-
197	Hamilton,	99 98	30	533 28	1 60	-	-
198	Southborough, . .	354 79	1 11	171 54	53	-	-
199	Rutland,	58 91	26	20 83	09	-	-
200	Wrentham,	92 29	40	303 24	1 31	-	-
201	Colrain,	66 83	22	333 55	1 12	-	-
202	Marshfield,	57 00	25	109 73	48	-	-
203	Raynham,	1 80	01	189 31	91	-	-
204	Northborough, . .	47 38	17	269 69	95	-	-
205	Bellingham,	-	-	519 23	2 13	-	-
206	Acushnet,	42 35	17	168 45	68	-	-
207	Duxbury,	186 57	72	1,294 04	5 02	-	-
208	Sandwich,	104 88	42	477 44	1 93	-	-
209	Ashland,	129 79	42	134 16	43	-	-
210	Carver,	-	-	68 40	35	-	-
211	Salisbury,	40 55	16	148 21	58	-	-
212	Northfield,	44 35	16	352 56	1 25	-	-
213	Essex,	-	-	448 93	1 66	-	-
214	Buckland,	73 92	32	131 55	57	-	-
215	Chatham,	228 77	1 14	593 34	2 97	-	-
216	East Longmeadow, .	28 85	09	372 67	1 16	\$5 00	\$0 02
217	Cheshire,	142 34	62	154 05	67	-	-
218	Shelburne,	186 52	70	919 63	3 43	-	-
219	Newbury,	41 23	21	249 51	1 27	-	-
220	Huntington,	544 41	1 91	129 21	45	-	-
221	West Newbury, . .	83 51	37	150 41	67	-	-
222	Freetown,	50 00	22	351 60	1 52	-	-
223	Marion,	538 59	2 90	63 08	34	-	-
224	Sherborn,	7 00	03	218 64	1 05	-	-
225	Yarmouth,	-	-	258 46	1 27	-	-
226	Norwell,	40 25	16	350 15	1 35	-	-
227	Millis,	27 71	11	105 24	41	-	-
228	Lunenburg,	-	-	182 28	84	-	-
229	Plainville,	472 42	2 05	-	-	-	-
230	Chester,	-	-	163 58	54	-	-
231	Rowley,	23 45	10	249 57	1 03	-	-
232	Sterling,	-	-	452 98	2 22	-	-
233	Westminster, . . .	26 53	13	812 40	3 83	-	-
234	Pembroke,	33 31	15	180 42	81	-	-
235	West Brookfield, .	-	-	290 50	1 83	-	-
236	West Stockbridge, .	54 95	35	378 42	2 44	-	-
237	West Boylston, . .	155 89	68	214 86	93	-	-
238	Westwood,	97 29	48	256 61	1 26	-	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditure for the support of public schools, being the total of items in the eighteen preceding columns.	Cost per pupil in average membership.
\$77 16	\$0 29	\$734 60	\$2 76	\$1,167 50	\$4 39	\$8,758 78	\$32 93
-	-	100 00	34	174 54	59	9,126 74	31 04
50 00	17	2,217 50	7 52	20 00	07	11,124 19	37 71
114 00	34	230 25	69	469 99	1 41	13,834 65	41 42
160 00	50	2,182 64	6 80	105 34	33	14,860 20	46 29
175 00	78	1,742 85	7 82	-	-	7,853 17	35 22
8 50	04	1,263 33	5 45	-	-	11,023 46	47 51
50 00	27	530 20	1 78	1,510 10	5 07	9,975 29	33 47
61 50	27	2,940 27	12 95	42 96	19	10,336 44	45 53
31 00	15	600 50	2 99	115 00	56	6,162 91	29 77
113 07	40	2,253 70	7 96	-	-	10,548 57	37 27
39 50	16	1,188 00	4 87	1,015 00	4 16	9,550 80	39 14
75 00	30	1,876 00	7 63	1,806 26	7 34	9,578 11	38 14
7 00	03	1,298 75	5 03	-	-	13,221 11	51 24
35 00	14	194 02	78	-	-	9,195 12	37 23
-	-	1,132 00	3 63	32 97	11	10,442 83	33 47
50 00	26	1,558 55	7 95	-	-	8,886 27	45 34
5 00	02	875 00	3 40	495 52	1 93	6,891 60	26 82
-	-	1,005 50	3 56	251 52	89	9,969 47	35 35
30 00	11	462 45	1 71	48 00	18	9,379 77	34 37
25 00	11	474 60	2 06	1,245 54	5 42	7,456 65	32 42
50 00	25	280 88	1 40	100 00	50	8,522 18	42 61
48 00	15	-	-	3,235 02	10 05	11,308 62	35 12
40 00	17	1,292 50	5 62	1,092 00	4 75	8,219 70	35 74
50 00	19	637 50	2 38	2,944 90	10 99	16,595 07	61 92
28 00	14	917 00	4 68	433 95	2 21	8,467 38	43 20
76 70	27	715 00	2 51	-	-	9,388 70	32 94
28 10	13	1,166 91	5 23	40 48	18	9,233 33	41 41
50 00	22	239 00	1 03	992 87	4 28	8,344 80	35 80
54 25	29	999 50	5 37	66 82	36	8,661 73	46 57
12 50	06	2,252 00	10 83	24 00	12	9,763 36	45 94
21 00	10	1,637 50	8 03	25 00	12	12,594 28	61 75
-	-	2,470 00	9 50	42 48	16	10,570 19	40 66
100 00	39	741 30	2 92	192 92	76	8,192 84	32 26
77 50	36	595 90	2 75	68 01	31	8,285 65	38 18
41 00	18	1,178 00	5 12	-	-	9,796 07	42 59
50 00	16	82 74	27	213 22	70	9,875 71	32 49
13 00	05	1,106 50	4 57	2,200 06	9 09	9,596 00	39 65
15 00	07	503 20	2 47	67 45	33	8,156 64	39 98
-	-	377 50	1 78	-	-	8,349 64	39 38
50 00	22	1,453 00	6 51	320 95	1 44	8,772 01	39 34
50 00	31	1,184 50	7 45	1,200 00	7 55	7,811 45	49 13
5 00	03	973 97	6 28	1,299 04	8 38	7,261 90	46 85
246 05	1 07	2,315 00	10 02	372 95	1 62	12,860 10	55 91
100 00	49	1,827 55	8 96	2,110 02	10 34	12,462 33	61 09

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
194	Hanson,	\$1,000 00	-	\$1,000 00
195	Sheffield,	-	-	-
196	Townsend,	-	-	-
197	Hamilton,	-	\$473 35	473 35
198	Southborough,	7,814 32	398 72	8,213 04
199	Rutland,	-	-	-
200	Wrentham,	-	-	-
201	Colrain,	25 00	-	25 00
202	Marshfield,	-	-	-
203	Raynham,	-	-	-
204	Northborough,	-	-	-
205	Bellingham,	-	-	-
206	Acushnet,	-	-	-
207	Duxbury,	-	-	-
208	Sandwich,	-	-	-
209	Ashland,	4 25	61 65	65 90
210	Carver,	18 65	165 20	183 85
211	Salisbury,	-	-	-
212	Northfield,	-	-	-
213	Essex,	-	-	-
214	Buckland,	-	-	-
215	Chatham,	-	-	-
216	East Longmeadow,	-	-	-
217	Cheshire,	-	-	-
218	Shelburne,	142 43	220 73	363 16
219	Newbury,	-	-	-
220	Huntington,	-	-	-
221	West Newbury,	-	-	-
222	Freetown,	310 41	-	310 41
223	Marion,	5,550 65	218 20	5,768 85
224	Sherborn,	55 81	-	55 81
225	Yarmouth,	-	117 25	117 25
226	Norwell,	-	-	-
227	Millis,	-	-	-
228	Lunenburg,	-	-	-
229	Plainville,	280 96	109 26	390 22
230	Chester,	2,078 76	-	2,078 76
231	Rowley,	-	-	-
232	Sterling,	-	-	-
233	Westminster,	17,895 00	224 98	18,119 98
234	Pembroke,	-	-	-
235	West Brookfield,	-	-	-
236	West Stockbridge,	-	-	-
237	West Boylston,	-	67 49	67 49
238	Westwood,	-	-	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING TOWN FISCAL YEAR.		Expenditure for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 26, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$7,131 95	\$1,676 85	-	-	\$952 55	-
6,572 99	2,470 09	\$2,223 30	\$40 00	1,220 05	-
8,150 88	2,402 02	2,935 01	-	1,220 05	-
14,284 71	132 00	4,398 16	-	-	-
12,413 83	2,386 83	4,409 86	-	1,145 05	-
5,533 13	2,084 01	2,000 10	-	1,102 55	-
10,226 52	1,694 13	3,435 21	-	952 55	\$117 83
6,253 52	3,282 38	-	-	1,370 05	-
8,217 89	1,374 22	2,872 43	-	-	-
4,552 12	2,684 40	-	-	1,370 05	-
8,404 03	2,314 60	2,919 56	-	1,220 05	-
6,660 87	2,982 32	-	-	1,370 05	458 22
7,053 97	2,993 84	-	-	952 55	-
11,364 96	685 89	2,904 60	-	-	-
7,612 62	2,015 05	3,433 34	-	952 55	-
8,860 19	2,078 10	3,041 89	-	952 55	39 07
6,724 88	1,895 97	3,025 04	-	952 55	-
4,615 41	1,827 26	-	-	792 04	-
7,141 11	2,383 23	3,279 08	-	792 04	-
6,619 37	2,138 42	3,504 88	-	952 55	-
4,943 43	2,886 05	-	-	1,102 55	-
6,816 33	1,308 89	2,989 79	-	952 55	-
5,858 72	4,930 10	-	-	1,102 55	-
5,505 85	2,679 09	-	-	1,370 05	-
7,371 62	2,272 75	6,719 21	-	1,220 05	1,270 01
6,068 98	1,969 26	-	-	1,220 05	-
6,553 54	2,547 96	3,067 21	-	1,370 05	-
7,328 14	2,139 71	2,435 02	-	952 55	-
5,541 64	2,633 75	-	-	1,370 05	74 59
8,449 31	6 35	-	-	-	-
6,520 44	2,497 51	2,900 55	-	1,220 05	-
9,362 28	3,024 45	3,070 50	-	877 55	-
8,262 99	2,561 35	3,484 85	-	1,220 05	-
6,544 77	1,809 05	2,223 17	22 75	952 55	-
5,773 66	1,787 10	2,274 03	-	952 55	-
7,271 45	2,411 06	2,927 18	-	1,370 05	865 14
6,691 53	3,061 08	2,749 99	-	1,102 55	215 00
6,409 91	2,831 21	-	-	717 04	-
4,816 86	2,843 98	1,839 00	-	1,220 05	1,220 05
5,639 66	1,950 55	1,084 43	-	1,102 55	-
7,090 57	2,630 72	3,373 07	-	1,370 05	-
4,925 00	2,712 90	-	-	1,102 55	-
3,800 00	2,427 31	-	-	1,370 05	381 68
9,431 89	2,179 69	3,278 94	-	1,370 05	235 48
12,505 90	527 00	-	20 00	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in towns between 6 and 15 years of age.	Number of persons in towns between 7 and 14 years of age.
239	Mattapoissett, . . .	1,233	\$1,996,562	6	244	181
240	Bedford, . . .	1,231	1,669,495	4	172	121
241	Conway, . . .	1,230	750,456	9	215	158
242	Littleton, . . .	1,229	1,169,193	7	187	141
243	Clarksburg, . . .	1,207	283,299	7	233	197
244	Tisbury, . . .	1,196	1,689,088	7	212	142
245	Edgartown, . . .	1,191	1,097,990	6	146	102
246	Nahant, . . .	1,184	9,184,295	6	195	139
247	Lincoln, . . .	1,175	4,039,382	5	185	147
248	Topsfield, . . .	1,174	3,109,877	5	128	93
249	Erving, . . .	1,148	1,017,305	7	210	156
250	Lakeville, . . .	1,141	1,065,200	7	173	133
251	Middleton, . . .	1,129	886,489	4	166	118
252	New Marlborough, . .	1,124	800,860	11	191	146
253	Sudbury, . . .	1,120	1,360,695	7	175	118
254	Hinsdale, . . .	1,116	618,703	9	232	172
255	Stow, . . .	1,115	1,062,062	7	209	152
256	Rochester, . . .	1,090	949,801	8	169	140
257	Longmeadow, . . .	1,084	2,133,915	5	242	187
258	Oak Bluffs, . . .	1,084	1,888,650	7	231	154
259	Orleans, . . .	1,077	1,913,327	5	174	112
260	Hubbardston, . . .	1,073	768,695	8	181	141
261	North Reading, . . .	1,059	885,254	4	207	148
262	Sunderland, . . .	1,047	567,870	5	205	149
263	Harvard, . . .	1,034	1,701,334	4	148	123
264	Wellfleet, . . .	1,022	1,018,655	5	128	107
265	Southwick, . . .	1,020	841,525	11	158	126
266	Wenham, . . .	1,010	2,627,900	7	187	154
267	Charlemont, . . .	1,001	535,546	9	163	129
268	Berkley, . . .	999	414,433	8	189	158
269	Russell, . . .	965	998,105	10	162	115
270	Norfolk, . . .	960	1,046,100	6	179	136
271	Ashfield, . . .	959	724,342	10	132	94
272	Becket, . . .	959	566,932	6	157	125
273	Lanesborough, . . .	947	619,073	6	151	116
274	Gill, . . .	942	494,961	6	168	128
275	Lynnfield, . . .	911	1,199,311	4	142	106
276	Berlin, . . .	904	607,760	6	181	139
277	Ashby, . . .	885	586,382	5	145	95
278	Mendon, . . .	880	688,590	6	159	110
279	Enfield, . . .	874	725,450	7	169	137
280	Southampton, . . .	870	498,905	8	145	105
281	Brimfield, . . .	866	581,532	7	144	110
282	Whately, . . .	846	486,394	5	175	106
283	Tyngsborough, . . .	829	655,347	4	146	103

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 5 years of age.	Number of different pupils within the year over 15 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
234	2	1	190	213	-	199	93	10
174	-	1	139	150	36	140	95	15
223	-	19	156	206	-	194	94	10
222	-	31	155	212	-	197	93	18
203	-	6	156	166	16	148	90	11
241	-	41	176	236	-	222	95	24
171	-	24	114	163	-	152	93	9
226	-	18	128	199	-	181	91	10
164	-	-	137	157	35	146	93	12
147	1	21	93	137	-	128	93	15
230	2	7	159	219	15	203	93	11
180	1	2	153	168	15	151	90	12
147	1	10	96	140	32	131	94	14
203	2	9	160	167	-	149	88	10
196	3	25	124	176	-	163	93	9
234	6	8	163	205	19	182	89	9
245	1	24	166	230	-	216	93	19
212	1	2	165	165	12	146	89	14
164	1	10	121	156	49	144	92	9
222	-	22	146	187	-	177	92	7
203	-	38	107	184	-	169	92	15
209	-	16	151	181	15	166	92	7
183	-	8	135	163	33	152	93	18
177	-	4	146	154	23	141	92	9
115	-	1	76	105	-	93	89	13
151	-	14	107	135	-	128	93	10
174	2	12	129	161	11	152	95	7
173	4	3	123	162	38	152	94	25
186	3	29	121	168	1	158	94	11
180	-	2	152	160	15	147	92	3
166	14	2	123	146	8	132	90	6
167	1	2	131	163	13	151	93	6
184	-	44	111	181	-	171	94	7
177	-	1	145	132	14	118	90	7
155	2	1	119	141	22	128	91	16
174	-	2	130	151	16	134	89	8
141	1	3	84	119	24	113	95	7
160	-	5	123	147	29	135	92	16
141	-	14	102	130	-	119	92	13
173	-	24	114	161	-	153	95	10
166	-	8	137	174	22	165	95	13
142	3	-	104	123	20	113	92	8
212	1	50	125	183	-	171	93	14
139	-	3	106	120	2	118	89	10
124	-	3	93	109	24	102	94	6

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
239	Mattapoisett,	1	6	-	-	5	9-13	
240	Bedford,	1	3	-	-	1	9-8	
241	Conway,	1	9	-	2	3	9-2	
242	Littleton,	1	8	-	3	6	8-19	
243	Clarksburg,	-	7	-	-	6	8-17	
244	Tisbury,	1	8	1	2	2	9-3	
245	Edgartown,	2	6	-	2	2	8-10	
246	Nahant,	1	9	-	3	6	9-3	
247	Lincoln,	-	7	-	-	5	9-6	
248	Topsfield,	1	6	-	3	1	9-12	
249	Erving,	-	8	-	-	6	8-18	
250	Lakeville,	-	7	-	-	5	8-16	
251	Middleton,	-	4	-	-	2	9-9	
252	New Marlborough,	1	11	-	2	4	8-18	
253	Sudbury,	1	8	1	3	4	9-13	
254	Hinsdale,	-	9	-	-	5	9-7	
255	Stow,	1	7	1	2	3	9-9	
256	Rochester,	-	8	-	-	8	8-16	
257	Longmeadow,	-	5	-	-	5	8-19	
258	Oak Bluffs,	1	7	-	2	2	8-17	
259	Orleans,	2	7	-	3	4	9	
260	Hubbardston,	1	7	-	-	2	8-15	
261	North Reading,	-	4	-	-	4	9-8	
262	Sunderland,	-	6	-	-	3	8-15	
263	Harvard,	-	4	-	3	3	9-7	
264	Wellfleet,	1	5	-	-	4	9-8	
265	Southwick,	-	11	-	-	5	9-4	
266	Wenham,	-	7	-	-	4	9-4	
267	Charlemont,	1	10	-	2	1	8-3	
268	Berkley,	-	8	-	-	3	8-18	
269	Russell,	-	10	1	-	5	9-8	
270	Norfolk,	-	6	-	-	3	8-19	
271	Ashfield,	1	12	-	4	1	8-15	
272	Becket,	-	7	-	-	5	8-12	
273	Lanesborough,	-	6	-	-	4	8-19	
274	Gill,	-	6	-	-	2	8-18	
275	Lynnfield,	-	5	1	-	3	9-8	
276	Berlin,	-	6	-	-	1	9-2	
277	Ashby,	-	6	-	2	2	8-17	
278	Mendon,	1	6	-	2	2	8-16	
279	Enfield,	-	7	-	-	2	8-15	
280	Southampton,	-	8	1	-	3	8-17	
281	Brimfield,	1	9	-	3	4	9-7	
282	Whately,	-	5	-	-	5	8-17	
283	Tyngsborough,	-	4	-	-	4	9-18	

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

HIGH SCHOOLS.

Number of high schools.	Length of high school year.	Number of teachers.	NUMBER OF PUPILS.		NUMBER OF PUPILS ADMITTED TO THE FRESHMAN CLASS.		NUMBER OF GRADUATES.	
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
-	-	-	-	-	-	-	-	-
1	10	2	14	14	5	4	1	1
1	9-17	3	13	31	4	3	-	10
-	-	-	-	-	-	-	-	-
1	9-16	3	26	25	10	16	9	1
1	9-6	2	15	16	4	7	3	2
1	9-4	3	8	21	3	4	1	4
-	-	-	-	-	-	-	-	-
1	9-12	3	21	11	11	4	3	1
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
1	9-17	2	5	11	2	4	1	1
1	10	2	5	17	1	6	1	5
-	-	-	-	-	-	-	-	-
1	9-16	2	23	20	10	8	1	3
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
1	8-17	2	14	12	6	8	-	-
1	9-16	3	22	32	7	11	3	8
1	9-12	1	10	4	4	3	4	1
-	-	-	-	-	-	-	-	-
1	8	3	22	19	9	7	2	8
1	9-17	2	14	14	4	6	1	3
-	-	-	-	-	-	-	-	-
1	10	2	13	24	8	10	2	4
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
1	10	4	33	27	8	9	10	5
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
1	9-15	2	4	7	2	2	1	3
1	9-13	2	16	18	6	4	3	6
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
1	9-10	4	27	30	6	10	3	5
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-

¹ Bromfield School.

² Hitchcock Free Academy.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
239	Mattapoisett,	213	\$105 00	\$0 49	\$25 69	\$0 12
240	Bedford,	150	-	-	8 00	06
241	Conway,	206	75 00	37	-	-
242	Littleton,	212	-	-	19 50	09
243	Clarksburg,	166	45 00	27	19 50	12
244	Tisbury,	236	75 00	32	47 96	20
245	Edgartown,	163	75 00	46	37 00	23
246	Nahant,	199	-	-	10 50	05
247	Lincoln,	157	-	-	10 00	06
248	Topsfield,	137	45 00	33	45 63	33
249	Erving,	219	45 00	21	19 23	09
250	Lakeville,	168	69 04	41	-	-
251	Middleton,	140	105 00	75	29 03	21
252	New Marlborough,	167	85 00	51	-	-
253	Sudbury,	176	96 80	55	18 82	11
254	Hinsdale,	205	75 00	37	17 34	08
255	Stow,	230	100 00	43	-	-
256	Rochester,	165	44 50	27	-	-
257	Longmeadow,	156	30 00	19	10 00	06
258	Oak Bluffs,	187	75 00	40	20 00	11
259	Orleans,	184	200 00	1 09	19 95	11
260	Hubbardston,	181	92 00	51	-	-
261	North Reading,	163	50 00	31	4 00	02
262	Sunderland,	154	50 00	32	10 12	07
263	Harvard,	105	70 00	67	13 66	13
264	Wellfleet,	135	95 00	70	-	-
265	Southwick,	161	61 00	38	20 40	13
266	Wenham,	162	110 00	68	7 50	05
267	Charlemont,	168	75 00	45	24 75	16
268	Berkley,	160	79 50	50	20 00	12
269	Russell,	146	75 00	51	42 01	29
270	Norfolk,	163	114 00	70	9 62	06
271	Ashfield,	181	53 00	29	-	-
272	Becket,	132	-	-	54 00	41
273	Lanesborough,	141	145 00	1 03	-	-
274	Gill,	151	45 00	30	-	-
275	Lynnfield,	119	25 00	21	19 67	17
276	Berlin,	147	63 00	43	5 00	03
277	Ashby,	130	-	-	17 50	13
278	Mendon,	161	13 75	09	12 00	08
279	Enfield,	174	115 00	66	-	-
280	Southampton,	123	65 00	53	-	-
281	Brimfield,	183	70 00	38	13 70	07
282	Whately,	120	100 00	83	10 00	08
283	Tyngsborough,	109	25 00	23	6 30	06

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$341 59	\$1 60	\$24 00	\$0 11	\$410 00	\$1 93	-	-
630 00	4 20	-	-	325 00	2 17	-	-
438 00	2 12	37 74	19	-	-	-	-
433 83	2 04	37 74	18	-	-	-	-
475 00	2 86	20 45	12	-	-	-	-
400 00	1 70	42 56	19	-	-	-	-
320 00	1 98	16 31	10	125 00	77	-	-
425 00	2 14	25 00	13	-	-	-	-
550 00	3 50	10 79	07	1,050 00	6 69	-	-
273 26	1 99	11 38	09	225 00	1 64	-	-
528 00	2 41	11 62	05	-	-	-	-
450 00	2 68	-	-	-	-	-	-
265 88	1 90	16 88	12	204 00	1 46	-	-
608 00	3 64	-	-	-	-	-	-
480 00	2 73	14 63	08	387 50	2 20	-	-
593 10	2 89	9 45	05	-	-	-	-
450 00	1 96	-	-	280 00	1 22	-	-
453 00	2 75	31 12	19	120 00	73	\$54 00	\$0 33
249 96	1 60	25 00	16	380 00	2 44	41 25	26
400 00	2 14	63 72	34	-	-	-	-
309 08	1 68	34 16	19	140 04	76	-	-
360 00	1 99	6 57	04	-	-	-	-
173 29	1 06	22 94	14	177 00	1 08	-	-
347 76	2 26	32 46	21	-	-	-	-
379 92	3 61	3 50	03	244 00	2 32	-	-
262 60	1 95	-	-	-	-	-	-
595 00	3 70	11 00	07	-	-	-	-
465 28	2 87	23 10	14	324 00	2 00	2 40	02
548 00	3 26	23 15	14	100 00	59	-	-
320 04	2 00	16 11	10	-	-	-	-
450 03	3 08	16 00	11	-	-	-	-
450 00	2 76	-	-	-	-	-	-
584 63	3 23	-	-	-	-	-	-
468 85	3 55	37 00	28	-	-	-	-
528 00	3 74	-	-	-	-	-	-
360 00	2 38	8 46	06	-	-	-	-
173 44	1 46	14 26	12	325 00	2 73	-	-
254 76	1 73	12 32	08	314 50	2 14	-	-
320 00	2 46	-	-	121 58	93	-	-
616 60	3 83	24 08	15	120 00	74	-	-
420 00	2 41	-	-	-	-	-	-
375 00	3 05	-	-	62 50	51	-	-
540 00	2 95	12 50	07	100 00	55	-	-
204 60	1 71	46 53	39	270 00	2 25	-	-
176 83	1 62	9 44	09	150 00	1 38	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principal's salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
239	Mattapoisett,	\$750 00	\$3 52	\$2,659 00	\$12 40
240	Bedford,	800 00	5 33	1,971 50	13 14
241	Conway,	1,232 00	5 98	2,622 00	12 72
242	Littleton,	1,200 00	5 66	4,340 25	20 47
243	Clarksburg,	-	-	2,497 00	15 04
244	Tisbury,	1,100 00	4 66	3,742 75	15 86
245	Edgartown,	1,713 80	10 61	2,424 97	14 87
246	Nahant,	1,000 00	5 03	5,831 93	29 31
247	Lincoln,	600 00	3 82	2,640 22	15 81
248	Topsfield,	848 00	6 19	2,950 70	21 54
249	Erving,	936 00	4 27	2,138 50	9 76
250	Lakeville,	600 00	3 57	2,318 92	13 80
251	Middleton,	546 00	3 90	1,443 00	10 31
252	New Marlborough,	700 00	4 19	3,690 50	22 10
253	Sudbury,	1,000 00	5 68	4,012 97	22 80
254	Hinsdale,	-	-	4,041 90	19 72
255	Stow,	1,100 00	4 78	3,204 00	13 93
256	Rochester,	-	-	3,462 25	20 98
257	Longmeadow,	675 00	4 33	2,040 00	13 08
258	Oak Bluffs,	1,050 00	5 62	2,908 90	15 56
259	Orleans,	1,200 00	6 52	2,885 00	15 68
260	Hubbardston,	-	-	3,635 00	20 08
261	North Reading,	-	-	2,062 00	12 04
262	Sunderland,	-	-	2,552 00	16 57
263	Harvard,	600 00	5 72	1,534 66	14 61
264	Wellfleet,	850 00	6 30	2,257 00	16 72
265	Southwick,	-	-	4,380 40	27 21
266	Wenham,	576 00	3 56	2,684 00	16 57
267	Charlemont,	1,147 50	6 83	3,376 50	20 10
268	Berkley,	-	-	2,508 50	15 68
269	Russell,	-	-	4,664 40	31 95
270	Norfolk,	600 00	3 68	2,373 71	14 56
271	Ashfield,	905 00	5 00	4,280 40	23 65
272	Becket,	-	-	3,034 00	22 99
273	Lanesborough,	-	-	2,866 31	20 33
274	Gill,	-	-	2,417 30	16 01
275	Lynnfield,	1,240 00	10 42	1,605 00	13 49
276	Berlin,	555 00	3 78	2,072 00	14 10
277	Ashby,	600 00	1 62	1,607 00	12 36
278	Mendon,	900 00	5 59	2,441 99	15 17
279	Enfield,	-	-	3,006 00	17 28
280	Southampton,	-	-	3,008 73	24 46
281	Brimfield,	-	-	2,739 00	14 10
282	Whately,	-	-	1,922 45	16 02
283	Tyngsborough,	520 00	4 77	1,341 50	12 32

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$203 01	\$0 95	\$317 72	\$1 49	\$609 75	\$2 86	\$1,139 79	\$5 35
75 84	51	199 24	1 33	391 70	2 61	798 12	5 32
378 04	1 84	-	-	560 71	2 72	735 95	3 57
274 54	1 30	356 21	1 68	573 25	2 70	1,157 20	5 46
134 64	81	88 41	53	295 50	1 78	384 91	2 32
796 18	3 37	543 44	2 30	345 44	1 46	490 70	2 08
692 62	4 25	125 52	77	228 83	1 40	329 13	2 02
238 76	1 20	720 34	3 62	774 00	3 89	685 67	3 45
68 59	43	450 50	2 87	618 20	3 92	813 86	5 18
349 01	2 55	50 45	37	166 28	1 21	259 62	1 89
109 61	50	172 03	79	659 00	3 01	367 62	1 68
76 57	45	229 73	1 37	501 70	2 99	366 72	2 18
85 75	61	159 69	1 14	400 00	2 86	228 65	1 63
176 91	1 06	253 31	1 52	188 03	1 13	353 63	2 12
131 74	75	286 13	1 63	631 00	3 59	697 81	3 96
195 74	95	241 93	1 18	254 60	1 24	251 83	1 23
536 06	2 33	292 24	1 27	435 50	1 89	501 59	2 18
81 84	50	256 50	1 55	274 82	1 66	94 85	57
76 18	49	259 70	1 66	420 00	2 69	484 25	3 10
429 46	2 30	231 53	1 24	386 00	2 06	430 76	2 30
156 64	85	198 19	1 08	400 00	2 17	320 67	1 74
101 13	56	104 55	58	224 69	1 24	25 50	14
97 11	60	168 40	1 03	501 45	3 08	289 63	1 78
211 27	1 38	63 30	41	326 50	2 12	252 32	1 64
93 23	89	168 92	1 60	325 00	3 10	441 14	4 20
259 17	1 92	-	-	177 73	1 32	182 02	1 35
69 29	43	301 68	1 87	212 00	1 32	330 88	2 05
99 72	62	213 83	1 32	544 35	3 36	295 75	1 83
231 22	1 38	216 53	1 29	260 40	1 55	73 25	44
174 08	1 09	108 90	68	164 75	1 03	239 04	1 49
149 65	1 03	212 39	1 46	241 95	1 66	192 87	1 32
126 74	78	169 63	1 04	415 00	2 55	363 83	2 23
-	-	600 00	3 31	133 00	73	201 00	1 11
78 55	60	112 98	86	163 97	1 24	294 94	2 23
84 38	60	101 98	72	392 00	2 78	359 06	2 55
46 67	31	119 57	79	181 31	1 20	188 55	1 25
188 33	1 58	132 55	1 11	432 38	3 63	245 50	2 06
236 82	1 61	160 80	1 09	466 00	3 17	323 40	2 20
66 73	51	199 05	1 53	325 75	2 51	263 93	2 03
250 50	1 55	3 54	02	338 00	2 10	230 00	1 43
154 09	89	384 89	2 21	306 00	1 76	157 90	91
270 76	2 20	3 50	03	80 05	65	198 05	1 61
245 06	1 34	175 90	96	305 30	1 67	694 85	3 80
115 71	96	257 48	2 15	139 04	1 16	194 41	1 62
67 91	64	116 33	1 07	320 00	2 94	229 38	2 11

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
		Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
239	Mattapoisett, . . .	\$35 41	\$0 17	\$283 42	\$1 33	-	-
240	Bedford, . . .	175 34	1 17	180 23	1 20	-	-
241	Conway, . . .	-	-	503 16	2 44	-	-
242	Littleton, . . .	119 50	94	204 26	96	-	-
243	Clarksburg, . . .	12 27	07	64 08	39	\$0 50	-
244	Tisbury, . . .	24 45	10	705 77	2 99	-	-
245	Edgartown, . . .	110 15	68	293 56	1 80	-	-
246	Nahant, . . .	48 69	24	194 71	98	-	-
247	Lincoln, . . .	161 75	1 03	69 86	44	-	-
248	Topsfield, . . .	27 00	20	112 99	82	-	-
249	Erving, . . .	50 01	23	17 05	08	-	-
250	Lakeville, . . .	-	-	176 45	1 05	-	-
251	Middleton, . . .	45 77	32	244 10	1 74	-	-
252	New Marlborough, . .	46 13	28	96 43	58	-	-
253	Sudbury, . . .	91 10	52	345 82	1 96	-	-
254	Hinsdale, . . .	-	-	265 53	1 31	-	-
255	Stow, . . .	-	-	60 76	26	-	-
256	Rochester, . . .	-	-	293 60	1 78	-	-
257	Longmeadow, . . .	37 12	24	104 58	67	-	-
258	Oak Bluffs, . . .	47 84	26	194 89	1 04	-	-
259	Orleans, . . .	110 35	60	545 16	2 96	-	-
260	Hubbardston, . . .	-	-	372 03	2 06	-	-
261	North Reading, . . .	24 79	15	20 28	12	-	-
262	Sunderland, . . .	41 44	27	19 80	13	-	-
263	Harvard, . . .	65 51	62	51 17	49	-	-
264	Wellfleet, . . .	72 63	54	317 43	2 35	-	-
265	Southwick, . . .	-	-	275 95	1 71	-	-
266	Wenham, . . .	64 68	40	314 32	1 94	-	-
267	Charlemont, . . .	75 94	45	91 48	54	-	-
268	Berkley, . . .	-	-	167 66	1 05	-	-
269	Russell, . . .	34 30	23	851 87	5 83	-	-
270	Norfolk, . . .	17 15	11	350 04	2 15	-	-
271	Ashfield, . . .	56 26	31	55 00	30	-	-
272	Becket, . . .	19 52	15	339 93	2 57	-	-
273	Lanesborough, . . .	91 22	65	241 76	1 71	-	-
274	Gill, . . .	21 35	14	204 52	1 35	-	-
275	Lynnfield, . . .	42 43	36	207 53	1 74	-	-
276	Berlin, . . .	84 65	58	48 67	33	-	-
277	Ashby, . . .	16 85	13	27 15	21	-	-
278	Mendon, . . .	11 75	07	35 40	22	-	-
279	Enfield, . . .	42 50	24	163 30	94	-	-
280	Southampton, . . .	-	-	145 04	1 18	-	-
281	Brimfield, . . .	31 98	17	457 33	2 50	-	-
282	Whately, . . .	36 58	30	47 08	39	-	-
283	Tyngaborough, . . .	39 54	36	225 20	2 07	-	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditure for the support of public schools, being the total of items in the eighteen preceding columns.	Cost per pupil in average membership.
\$33 00	\$0 16	\$1,733 37	\$8 14	\$20 75	\$0 10	\$8,691 50	\$40 81
50 00	33	1,248 90	8 33	1,825 16	12 16	8,679 03	57 86
-	-	887 35	4 31	222 23	1 08	7,692 18	37 34
35 00	17	1,476 00	6 96	-	-	10,226 78	48 24
34 00	20	-	-	621 77	3 74	4,657 03	28 05
30 00	13	136 00	58	132 00	56	8,612 25	36 49
73 40	45	284 00	1 74	103 42	63	6,952 71	42 65
200 00	1 00	-	-	-	-	10,154 60	51 03
219 50	1 40	2,572 60	16 38	1,970 81	12 55	11,806 68	75 20
-	-	599 50	4 38	-	-	5,963 82	43 53
26 95	12	678 34	3 10	615 37	2 81	6,410 33	29 27
50 00	30	1,668 00	9 93	1,220 67	7 26	7,727 80	46 00
10 00	07	1,657 25	11 84	845 00	6 03	6,286 00	44 90
25 00	15	596 50	3 57	-	-	6,819 44	40 83
50 00	28	2,295 00	13 04	39 20	22	10,578 52	60 10
75 00	37	260 00	1 27	893 05	4 36	7,174 47	35 00
-	-	1,640 10	7 13	-	-	8,600 25	37 39
47 55	29	1,144 25	6 94	1,189 45	7 21	7,547 73	45 74
44 00	28	560 00	3 59	5,602 50	35 91	11,039 54	70 77
28 10	15	324 00	1 73	38 96	21	6,629 16	35 45
33 00	18	1,624 00	8 83	-	-	8,176 24	44 44
28 50	16	819 25	4 53	512 70	2 83	6,281 92	34 71
42 50	26	1,830 50	11 23	1,691 25	10 38	7,155 14	43 65
23 18	15	1,961 20	12 73	707 40	4 59	6,598 75	42 85
25 50	24	4,035 00	38 43	-	-	8,051 21	76 68
-	-	1,159 50	8 59	-	-	5,633 08	41 73
50 00	31	-	-	519 80	3 23	6,827 40	42 41
6 00	04	382 30	2 36	2,180 90	13 46	8,294 13	51 20
50 00	30	584 75	3 48	43 51	26	6,921 98	41 20
25 00	16	216 05	1 35	150 00	94	4,189 63	26 19
35 00	24	115 00	79	212 49	1 45	7,292 96	49 95
10 00	06	1,710 35	10 49	610 25	3 74	7,320 32	44 91
-	-	205 00	1 13	-	-	7,073 29	39 08
20 00	15	49 00	37	966 08	7 32	5,638 82	42 72
30 00	21	391 65	2 78	863 20	6 12	6,094 56	43 22
35 00	23	548 40	3 63	501 25	3 32	4,677 38	30 98
24 00	20	260 00	2 18	2,037 70	17 12	6,972 79	58 59
39 00	27	798 20	5 43	1,581 50	10 76	7,015 62	47 73
25 00	19	2,266 75	17 44	31 25	24	5,888 54	45 30
25 00	16	936 41	5 82	42 71	27	6,001 73	37 28
-	-	1,196 50	6 88	572 40	3 29	6,518 58	37 46
1 00	01	52 54	43	870 00	7 07	5,132 17	41 72
27 50	15	1,102 50	6 02	39 07	21	6,554 09	35 82
40 00	33	274 00	2 28	267 16	2 23	3,925 04	32 71
100 00	92	1,995 15	18 30	1,933 00	17 73	7,255 58	66 56

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
239	Mattapoisett,	\$26 25	\$30 32	\$56 57
240	Bedford,	142 41	94 97	237 38
241	Conway,	-	-	-
242	Littleton,	-	-	-
243	Clarksburg,	-	11 11	11 11
244	Tisbury,	-	-	-
245	Edgartown,	179 53	12 00	191 53
246	Nahant,	-	416 64	416 64
247	Lincoln,	-	-	-
248	Topsfield,	-	-	-
249	Erving,	-	-	-
250	Lakeville,	10,500 00	276 75	10,776 75
251	Middleton,	-	-	-
252	New Marlborough,	-	-	-
253	Sudbury,	-	-	-
254	Hinsdale,	122 15	-	122 15
255	Stow,	-	-	-
256	Rochester,	-	-	-
257	Longmeadow,	108 37	34 00	142 37
258	Oak Bluffs,	-	-	-
259	Orleans,	-	-	-
260	Hubbardston,	-	-	-
261	North Reading,	94 62	-	94 62
262	Sunderland,	-	-	-
263	Harvard,	-	-	-
264	Wellfleet,	-	-	-
265	Southwick,	-	-	-
266	Wenham,	-	141 27	141 27
267	Charlemont,	23 00	3 75	26 75
268	Berkley,	-	-	-
269	Russell,	-	-	-
270	Norfolk,	-	2,651 03	2,651 03
271	Ashfield,	-	-	-
272	Becket,	-	-	-
273	Lanesborough,	-	-	-
274	Gill,	-	-	-
275	Lynnfield,	86 12	24 00	110 12
276	Berlin,	-	-	-
277	Ashby,	-	-	-
278	Mendon,	-	-	-
279	Enfield,	-	-	-
280	Southampton,	-	-	-
281	Brimfield,	-	-	-
282	Whately,	-	-	-
283	Tyngsborough,	-	-	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING TOWN FISCAL YEAR.		Expenditures for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 25, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$6,576 12	\$1,662 40	-	-	\$952 55	\$952 55
6,547 36	1,870 91	-	\$400 00	685 03	-
4,819 05	2,058 45	\$1,835 00	-	1,370 05	377 32
8,064 20	1,810 55	2,924 25	-	952 55	-
3,700 64	975 77	-	-	1,377 55	1,019 01
5,519 28	1,959 05	2,923 95	-	952 55	-
4,834 81	1,542 04	1,904 63	50 00	792 04	-
8,935 74	-	2,204 23	-	-	-
10,847 20	343 40	-	14 50	-	-
5,604 54	201 38	1,985 37	-	-	-
4,428 69	1,973 99	-	-	952 55	952 55
4,141 58	2,752 69	-	125 00	952 55	80
2,666 83	2,511 93	-	-	1,370 05	702 04
4,739 92	2,077 55	1,317 05	-	1,102 55	-
8,168 50	1,870 13	3,435 79	176 65	952 55	-
4,581 97	2,699 11	-	-	1,370 05	3 81
5,653 70	2,677 89	2,190 00	-	1,220 05	-
3,517 56	3,591 46	-	-	1,370 05	2 31
10,434 36	1,096 50	-	-	877 55	334 55
5,741 06	369 21	1,559 31	-	150 00	146 11
5,480 60	2,411 44	3,264 00	-	1,220 05	-
4,136 74	1,918 02	1,401 98	-	1,102 55	-
4,409 40	3,023 18	-	-	835 03	-
4,148 00	2,542 86	-	-	1,370 05	-
6,602 00	1,228 20	-	-	952 55	263 78
4,067 82	1,617 33	1,562 00	-	685 03	-
3,526 99	3,200 39	-	10 00	1,370 05	-
7,612 97	671 53	-	-	-	-
4,472 82	3,107 22	2,247 17	18 49	1,370 06	-
2,197 80	1,967 05	-	-	1,377 55	-
5,258 00	1,658 87	-	-	1,102 55	-
5,208 28	2,057 30	-	12 00	1,220 05	-
3,177 88	3,112 50	3,316 57	-	942 04	-
2,981 97	2,544 88	-	-	1,102 55	125 64
3,246 76	2,724 68	-	-	1,370 05	-
2,200 00	2,453 18	-	-	1,302 55	25 04
4,936 68	1,234 82	-	-	685 03	685 03
3,438 97	3,499 06	-	-	1,370 06	325 80
4,115 86	2,123 23	1,336 16	-	1,370 05	4 75
4,024 69	2,093 81	1,929 39	-	1,370 05	-
4,399 64	2,950 40	-	-	1,370 05	-
2,140 00	2,627 50	-	-	1,217 04	577 18
3,974 06	1,976 75	-	-	1,370 06	1,168 85
2,171 32	1,844 07	-	-	1,302 55	-
4,019 26	3,017 20	-	50 00	1,370 05	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in towns between 6 and 16 years of age.	Number of persons in towns between 7 and 14 years of age.
284	Princeton, . . .	818	\$1,420,516	9	135	103
285	Dover, . . .	798	6,288,937	5	134	125
286	Royalston, . . .	792	696,100	8	158	123
287	Granville, . . .	781	590,621	9	144	108
288	Bolton, . . .	764	647,445	5	124	89
289	Granby, . . .	761	570,760	6	140	100
290	Petersham, . . .	757	1,105,180	6	156	137
291	Bernardston, . . .	741	467,555	6	134	107
292	Dana, . . .	736	421,386	5	101	69
293	Leverett, . . .	728	343,793	6	127	91
294	Boxford, . . .	718	1,525,798	6	121	99
295	Blandford, . . .	717	624,456	8	133	92
296	Boylston, . . .	714	518,500	4	168	121
297	Truro, . . .	655	394,770	5	137	104
298	Richmond, . . .	650	623,743	6	110	93
299	Hampden, . . .	645	424,575	6	111	94
300	New Salem, . . .	639	371,810	6	103	65
301	Cummington, . . .	637	336,399	8	117	95
302	Brewster, . . .	631	886,105	4	124	88
303	Egremont, . . .	605	490,732	3	69	50
304	Burlington, . . .	591	775,456	3	91	69
305	Worthington, . . .	589	367,129	7	116	84
306	Sandisfield, . . .	566	381,515	6	95	73
307	Plympton, . . .	561	415,903	3	102	75
308	Oakham, . . .	552	380,799	5	93	83
309	Carlisle, . . .	551	478,419	3	81	60
310	Halifax, . . .	550	650,246	3	84	74
311	Chesterfield, . . .	536	337,763	5	91	67
312	Eastham, . . .	518	461,942	3	100	79
313	Savoy, . . .	503	183,890	7	98	71
314	Wendell, . . .	502	483,360	4	84	54
315	Otis, . . .	494	259,383	5	77	50
316	Warwick, . . .	477	414,728	4	98	71
317	Pelham, . . .	467	371,154	4	116	96
318	Hancock, . . .	465	388,534	4	97	64
319	New Braintree, . . .	464	403,445	4	80	59
320	Rowe, . . .	456	211,624	5	88	66
321	Greenwich, . . .	452	254,630	2	85	68
322	West Tisbury, . . .	437	641,662	4	63	47
323	Phillipston, . . .	426	286,955	4	84	63
324	Hawley, . . .	424	197,968	8	101	74
325	Westhampton, . . .	423	264,546	5	103	78
326	Paxton, . . .	416	383,388	3	81	55
327	Dunstable, . . .	408	425,896	3	74	54
328	Plainfield, . . .	406	194,164	5	58	42

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 5 years of age.	Number of different pupils within the year over 15 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
138	1	12	94	125	1	116	93	8
132	-	20	93	111	-	103	93	4
164	1	7	124	151	6	136	92	12
137	-	5	112	118	5	111	94	12
123	-	11	87	110	-	102	93	8
147	-	20	99	138	-	125	90	7
157	-	32	106	141	-	130	93	14
164	-	19	113	151	-	140	93	13
94	-	3	73	87	10	80	93	8
148	3	2	105	126	8	114	90	3
120	-	2	95	107	6	97	91	3
136	2	-	99	104	7	91	88	4
162	-	3	121	149	14	139	93	14
119	-	6	101	108	11	100	92	3
124	-	5	103	96	10	90	94	7
133	-	7	100	120	6	111	92	7
121	-	19	85	102	1	94	93	7
103	-	2	83	92	14	88	95	10
90	-	13	62	82	-	74	89	5
75	-	-	61	59	10	51	87	-
84	-	-	61	77	15	74	95	6
115	-	5	90	101	7	89	94	16
97	2	2	78	78	-	71	91	-
87	-	-	76	80	8	71	89	6
93	-	1	83	82	18	78	95	8
85	1	2	60	73	15	67	91	7
90	-	3	78	82	6	77	94	7
98	1	8	68	81	1	74	92	-
101	-	4	77	102	13	96	95	6
108	-	4	76	86	2	73	91	5
66	-	4	48	58	1	53	91	2
80	2	-	50	71	2	55	78	3
98	-	3	71	79	3	73	92	6
114	-	2	99	95	7	89	93	3
93	-	5	63	76	1	67	88	10
71	-	-	56	70	17	60	86	8
76	-	3	61	69	1	66	95	10
50	-	3	45	48	8	45	95	9
69	1	2	54	57	6	50	87	7
77	-	1	54	68	5	60	89	3
95	-	5	78	90	2	85	95	8
96	1	4	68	77	9	70	91	2
69	-	1	55	65	6	57	88	10
58	-	3	50	56	5	52	93	9
53	-	1	45	49	12	46	95	4

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
284	Princeton,	1	8	-	-	8	8-18	
285	Dover,	2	5	-	3	3	9-12	
286	Royalston,	1	7	1	-	3	8-18	
287	Granville,	-	9	-	-	4	8-15	
288	Bolton,	1	5	-	1	3	9-8	
289	Granby,	1	6	-	2	3	9-4	
290	Petersham,	2	7	-	4	2	9-8	
291	Bernardston,	2	5	-	2	-	8-12	
292	Dana,	-	5	-	-	3	8-19	
293	Leverett,	-	6	-	-	2	8-18	
294	Boxford,	-	6	-	-	5	9-3	
295	Blandford,	-	8	-	-	2	8-10	
296	Boylston,	-	4	-	-	2	8-16	
297	Truro,	-	5	-	-	1	9-10	
298	Richmond,	-	6	-	-	3	9-2	
299	Hampden,	-	6	-	-	4	8-17	
300	New Salem,	1	6	-	2	1	8-12	
301	Cummington,	-	8	-	-	-	8-7	
302	Brewster,	1	4	-	1	2	9	
303	Egremont,	-	3	-	-	1	9-1	
304	Burlington,	-	3	-	-	1	9-7	
305	Worthington,	1	6	-	-	-	8-13	
306	Sandisfield,	-	6	-	-	2	8-10	
307	Plympton,	1	2	-	-	2	8-16	
308	Oakham,	-	5	-	-	-	8-5	
309	Carlisle,	-	3	-	-	-	8-18	
310	Halifax,	-	3	1	-	2	8-18	
311	Chesterfield,	1	4	1	-	-	8-13	
312	Eastham,	-	3	-	-	3	8-14	
313	Savoy,	-	7	-	-	5	8-1	
314	Wendell,	1	3	1	-	-	9	
315	Otis,	-	5	-	-	-	8	
316	Warwick,	-	4	-	-	-	9	
317	Pelham,	-	4	-	-	2	8-19	
318	Hancock,	-	5	-	-	1	8-17	
319	New Braintree,	-	4	-	-	4	8-15	
320	Rowe,	-	5	-	-	1	8-7	
321	Greenwich,	-	2	-	-	1	8-18	
322	West Tisbury,	-	4	-	1	2	8-13	
323	Phillipston,	-	4	-	-	2	8-18	
324	Hawley,	-	8	-	-	-	8-3	
325	Westhampton,	-	5	1	-	2	8-15	
326	Paxton,	1	2	-	-	2	9	
327	Dunstable,	-	3	1	-	2	9-8	
328	Plainfield,	-	5	-	-	-	8-6	

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

High Schools.

[illegible]

¹ Powers Institute.

² Barker Free School.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
284	Princeton,	125	-	-	\$1 10	\$0 01
285	Dover,	111	\$241 67	\$2 18	50 01	45
286	Royalston,	151	105 00	70	5 75	04
287	Granville,	118	40 00	34	13 40	11
288	Bolton,	110	61 50	56	37 00	34
289	Granby,	138	80 00	58	31 65	23
290	Petersham,	141	110 00	78	45 19	32
291	Bernardston,	151	65 00	43	22 13	15
292	Dana,	87	61 67	71	10 00	12
293	Leverett,	126	68 00	54	6 26	05
294	Boxford,	107	-	-	5 93	05
295	Blandford,	104	-	-	-	-
296	Boylston,	149	75 00	50	17 00	11
297	Truro,	108	90 00	83	3 00	03
298	Richmond,	96	-	-	20 85	22
299	Hampden,	120	80 00	67	39 30	33
300	New Salem,	102	50 00	49	14 53	14
301	Cummington,	92	40 00	44	12 00	13
302	Brewster,	82	95 00	1 16	15 00	18
303	Egremont,	59	70 45	1 19	26 27	45
304	Burlington,	77	-	-	5 75	07
305	Worthington,	101	75 00	74	15 93	16
306	Sandisfield,	78	43 50	56	28 58	37
307	Plympton,	80	55 00	69	5 00	06
308	Oakham,	82	55 45	68	-	-
309	Carlisle,	73	10 00	14	1 90	03
310	Halifax,	82	-	-	17 50	21
311	Chesterfield,	81	38 00	47	7 50	09
312	Eastham,	102	-	-	-	-
313	Savoy,	86	45 00	52	7 00	08
314	Wendell,	58	40 00	69	10 29	18
315	Otis,	71	45 00	64	-	-
316	Warwick,	79	10 00	13	20 30	26
317	Pelham,	95	-	-	1 50	02
318	Hancock,	76	37 25	49	21 78	29
319	New Braintree,	70	21 50	31	31 46	45
320	Rowe,	69	60 00	87	11 57	17
321	Greenwich,	48	40 00	84	7 40	15
322	West Tisbury,	57	20 00	35	-	-
323	Phillipston,	68	45 00	66	8 96	13
324	Hawley,	90	34 55	38	8 80	10
325	Westhampton,	77	43 00	56	-	-
326	Paxton,	65	50 00	77	4 25	07
327	Dunstable,	56	-	-	6 00	11
328	Plainfield,	49	19 15	39	37 63	77

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$300 00	\$2 40	\$7 30	\$0 06	\$302 65	\$2 42	-	-
330 00	2 97	-	-	666 50	6 00	-	-
372 00	2 46	8 88	06	360 00	2 38	-	-
510 00	4 32	5 85	05	-	-	-	-
380 00	3 46	-	-	186 00	1 69	-	-
437 40	3 17	28 85	21	100 00	72	-	-
360 00	2 56	22 75	16	-	-	-	-
333 72	2 21	15 28	10	100 00	66	-	-
413 90	4 76	8 35	10	-	-	-	-
450 00	3 57	9 35	07	-	-	-	-
366 66	3 43	2 50	02	407 63	3 81	\$50 25	\$0 47
399 96	3 84	-	-	290 00	2 79	-	-
199 99	1 34	10 85	07	190 00	1 28	-	-
242 40	2 25	4 00	04	-	-	18 67	17
505 20	5 26	7 28	08	216 00	2 25	-	-
300 00	2 50	26 47	22	200 00	1 67	27 79	23
589 35	5 78	13 10	13	-	-	-	-
448 91	4 88	13 52	15	150 00	1 63	-	-
272 04	3 32	9 52	12	-	-	-	-
252 60	4 28	11 49	19	214 50	3 64	-	-
270 00	3 51	-	-	180 00	2 34	8 00	10
375 00	3 71	13 00	13	200 00	1 98	-	-
425 00	5 45	4 50	06	-	-	-	-
220 00	2 75	10 45	13	-	-	-	-
255 00	3 11	-	-	124 00	1 51	-	-
200 00	2 74	14 05	20	-	-	-	-
220 00	2 68	7 05	09	126 65	1 54	-	-
375 00	4 63	6 66	08	-	-	-	-
187 47	1 84	-	-	62 23	61	-	-
450 00	5 23	38 46	45	-	-	-	-
318 75	5 50	10 06	18	-	-	-	-
320 00	4 51	2 00	03	-	-	-	-
360 00	4 56	8 46	11	-	-	-	-
350 00	3 69	4 70	05	-	-	-	-
380 00	5 00	5 14	07	-	-	-	-
507 50	7 25	-	-	-	-	-	-
300 00	4 35	13 15	19	-	-	-	-
165 66	3 44	12 00	25	-	-	-	-
240 00	4 21	4 50	08	150 00	2 63	-	-
180 00	2 66	-	-	188 00	2 77	-	-
631 50	7 02	2 00	02	-	-	-	-
225 00	2 92	-	-	-	-	-	-
170 04	2 62	6 86	10	72 00	1 11	-	-
174 13	3 11	-	-	38 00	68	-	-
291 88	5 95	13 92	28	-	-	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principals' salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
284	Princeton,	\$899 73	\$7 20	\$2,993 33	\$23 95
285	Dover,	2,300 00	20 72	3,467 00	31 23
286	Royalston,	-	-	3,270 00	21 65
287	Granville,	-	-	3,016 80	25 56
288	Bolton,	750 00	6 82	2,304 00	20 95
289	Granby,	812 50	5 89	2,692 66	19 51
290	Petersham,	1,100 00	7 80	4,942 00	35 05
291	Bernardston,	800 00	5 30	2,280 00	15 10
292	Dana,	-	-	2,152 20	24 74
293	Leverett,	-	-	2,295 00	18 21
294	Boxford,	-	-	2,474 90	23 13
295	Blandford,	-	-	2,866 80	27 56
296	Boylston,	575 00	3 86	1,400 00	9 40
297	Truro,	-	-	2,168 00	20 07
298	Richmond,	-	-	2,218 00	23 10
299	Hampden,	-	-	2,279 00	18 99
300	New Salem,	1,004 00	9 84	2,067 00	20 26
301	Cummington,	-	-	2,381 50	25 89
302	Brewster,	1,300 00	15 85	1,827 18	22 28
303	Egremont,	-	-	1,433 20	24 29
304	Burlington,	600 00	7 79	1,019 00	13 23
305	Worthington,	-	-	2,552 00	25 27
306	Sandisfield,	-	-	1,993 80	25 56
307	Plympton,	-	-	1,475 00	18 44
308	Oakham,	-	-	1,693 00	20 65
309	Carlisle,	-	-	1,256 95	17 22
310	Halifax,	-	-	1,387 50	16 92
311	Chesterfield,	-	-	1,945 00	24 01
312	Eastham,	-	-	1,440 00	14 12
313	Savoy,	-	-	2,207 00	25 66
314	Wendell,	-	-	1,438 00	24 79
315	Otis,	-	-	1,716 00	24 17
316	Warwick,	-	-	1,584 00	20 05
317	Pelham,	-	-	2,029 84	21 36
318	Hancock,	-	-	2,053 80	27 02
319	New Braintree,	-	-	1,672 00	23 89
320	Rowe,	-	-	1,596 00	23 13
321	Greenwich,	-	-	969 00	20 19
322	West Tisbury,	-	-	1,855 00	32 54
323	Phillipston,	-	-	1,564 50	23 01
324	Hawley,	-	-	2,569 50	28 55
325	Westhampton,	-	-	1,948 85	25 31
326	Paxton,	-	-	1,170 00	18 00
327	Dunstable,	-	-	1,387 00	24 77
328	Plainfield,	-	-	1,678 25	34 25

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$70 73	\$0 57	\$145 35	\$1 16	\$457 50	\$3 66	\$651 34	\$5 21
203 47	1 83	265 95	2 39	600 00	5 41	596 22	5 37
81 62	54	100 26	66	224 72	1 49	297 05	1 97
120 75	1 02	186 76	1 58	127 95	1 08	153 25	1 30
51 00	47	69 65	63	255 46	2 32	130 65	1 19
197 62	1 43	140 57	1 02	238 74	1 73	402 28	2 92
102 90	73	587 42	4 17	448 23	3 18	487 55	3 46
71 97	48	69 43	46	322 45	2 14	176 75	1 17
104 68	1 20	58 29	67	533 85	6 13	320 85	3 69
34 82	28	56 56	45	86 30	69	98 52	78
204 02	1 91	254 68	2 38	189 50	1 77	158 25	1 48
54 16	52	67 29	65	14 50	14	95 75	92
127 00	85	64 71	44	477 00	3 20	333 25	2 24
113 87	1 05	106 85	99	66 00	61	205 66	1 90
52 60	55	173 26	1 81	110 50	1 15	161 31	1 68
200 00	1 67	139 85	1 17	104 00	87	109 30	91
218 41	2 14	61 39	60	51 50	51	173 25	1 70
196 43	2 14	26 00	28	106 00	1 15	130 37	1 42
158 50	1 93	153 00	1 87	200 00	2 44	123 00	1 50
23 62	40	82 90	1 40	154 80	2 62	102 85	1 74
96 25	1 25	81 21	1 06	175 00	2 27	393 17	5 11
68 63	68	66 40	66	86 90	86	109 01	1 08
50 54	65	63 91	82	73 90	95	50 50	65
10 19	13	69 39	87	150 00	1 88	65 88	82
60 11	73	88 87	1 08	82 80	1 01	165 57	2 02
82 99	1 14	106 36	1 46	358 75	4 91	228 32	3 13
58 68	72	63 72	78	155 95	1 90	21 10	26
39 77	49	110 22	1 36	79 35	98	23 18	29
126 63	1 24	148 36	1 45	216 00	2 12	116 42	1 14
31 21	36	119 82	1 39	12 00	14	70 75	82
70 35	1 21	56 28	97	36 75	63	72 15	1 25
75 63	1 05	83 51	1 16	12 00	17	99 75	1 40
25 09	32	25 46	32	173 00	2 19	98 05	1 24
39 10	41	28 81	30	29 25	31	71 20	75
55 69	73	76 42	1 00	64 15	84	47 40	62
41 63	59	94 92	1 35	114 30	1 63	75 00	1 07
27 57	40	58 30	85	53 50	78	30 75	44
57 42	1 19	56 19	1 17	69 75	1 45	55 15	1 15
45 00	79	44 55	78	171 00	3 00	139 49	2 44
11 77	17	84 08	1 24	89 15	1 31	52 85	77
86 46	96	109 30	1 21	74 10	82	79 91	89
53 48	69	113 91	1 48	31 25	41	70 84	92
41 46	64	122 20	1 88	205 00	3 16	134 89	2 07
12 52	22	28 80	51	304 00	5 43	232 04	4 14
77 32	1 58	116 29	2 37	62 20	1 27	84 48	1 73

BOARD OF EDUCATION.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
		Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
284	Princeton,	\$19 78	\$0 16	\$258 32	\$2 07	-	-
285	Dover,	75 45	68	259 33	2 34	-	-
286	Royalston,	27 93	18	181 65	1 20	-	-
287	Granville,	10 00	08	253 79	2 15	-	-
288	Bolton,	15 43	14	697 36	6 34	-	-
289	Granby,	31 96	23	67 16	49	-	-
290	Petersham,	96 68	69	124 37	88	\$15 00	\$0 11
291	Bernardston,	18 89	12	26 73	18	-	-
292	Dana,	33 61	39	23 15	27	-	-
293	Leverett,	4 85	04	36 47	29	-	-
294	Boxford,	65 73	61	219 41	2 05	-	-
295	Blandford,	39 51	38	131 37	1 26	-	-
296	Boylston,	38 46	26	332 64	2 23	-	-
297	Truro,	24 00	22	249 68	2 31	-	-
298	Richmond,	24 00	25	374 63	3 90	-	-
299	Hampden,	54 08	45	111 59	93	-	-
300	New Salem,	3 31	03	45 19	44	-	-
301	Cummington,	3 00	03	111 74	1 21	-	-
302	Brewster,	109 54	1 33	281 67	3 43	-	-
303	Egremont,	-	-	314 92	5 33	-	-
304	Burlington,	13 15	17	320 67	4 16	-	-
305	Worthington,	84 23	83	218 37	2 16	-	-
306	Sandiafield,	5 66	07	179 93	2 31	-	-
307	Plympton,	20 35	25	37 17	46	-	-
308	Oakham,	4 70	06	487 80	5 95	-	-
309	Carlisle,	1 40	02	24 08	33	-	-
310	Halifax,	51 52	63	47 48	58	-	-
311	Chesterfield,	-	-	57 39	71	-	-
312	Eastham,	11 52	11	59 81	59	-	-
313	Savoy,	9 39	11	122 06	1 42	-	-
314	Wendell,	3 20	06	190 88	3 29	-	-
315	Otis,	22 69	32	72 85	1 02	-	-
316	Warwick,	26 70	34	161 93	2 05	-	-
317	Pelham,	25 10	26	89 45	94	-	-
318	Hancock,	3 25	04	83 58	1 10	-	-
319	New Braintree,	6 60	09	263 71	3 77	-	-
320	Rowe,	4 55	07	38 93	53	-	-
321	Greenwich,	11 25	23	13 90	29	-	-
322	West Tisbury,	36 52	64	74 45	1 31	-	-
323	Phillipston,	19 59	29	16 53	24	-	-
324	Hawley,	-	-	50 21	56	-	-
325	Westhampton,	47 61	62	155 27	2 02	-	-
326	Paxton,	-	-	3 00	05	-	-
327	Dunstable,	6 24	11	211 96	3 78	-	-
328	Plainfield,	-	-	43 35	88	-	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditure for the support of public schools, being the total of items in the eighteen preceding columns.	Cost per pupil in average membership.
\$75 00	\$0 60	\$493 10	\$3 95	\$151 50	\$1 21	\$6,826 73	\$54 61
25 00	23	2,765 60	24 91	23 15	21	11,869 35	106 93
-	-	1,086 04	7 19	181 60	1 20	6,302 50	41 73
28 25	24	665 80	5 64	581 90	4 93	5,714 50	48 43
41 00	37	2,554 50	23 22	-	-	7,533 55	68 49
15 80	11	1,163 30	8 43	109 76	80	6,550 25	47 47
10 50	07	1,597 62	11 33	87 30	62	10,137 51	71 90
35 00	23	568 75	3 77	-	-	4,906 10	32 49
30 00	35	240 15	2 76	680 00	7 82	4,670 70	53 68
5 00	04	742 55	5 89	205 00	1 63	4,098 68	32 53
35 00	33	187 00	1 75	230 00	2 15	4,851 46	45 34
15 00	14	247 60	2 38	484 25	4 66	4,706 19	45 25
75 00	50	2,424 50	16 27	683 54	4 58	7,023 94	47 14
-	-	9 75	09	170 00	1 57	3,471 88	32 15
8 00	08	295 10	3 07	376 95	3 93	4,543 68	47 33
23 00	19	150 00	1 25	600 00	5 00	4,444 38	37 04
30 00	29	696 30	6 82	45 00	44	5,062 33	49 63
27 00	29	256 60	2 79	832 00	9 04	4,735 07	51 47
10 00	12	1,099 00	13 40	153 00	1 86	5,806 45	70 81
25 00	43	-	-	522 00	8 85	3,234 60	54 82
40 00	52	1,045 00	13 57	847 94	11 01	5,095 14	66 17
45 00	45	623 00	6 17	515 33	5 10	5,047 80	49 98
18 00	23	446 05	5 72	51 50	66	3,435 37	44 04
25 00	31	122 65	1 53	431 96	5 40	2,698 04	33 73
20 00	24	-	-	820 00	10 00	3,857 30	47 04
25 00	34	1,269 30	17 39	25 00	34	3,604 10	49 37
25 00	30	1,350 30	16 47	396 37	4 83	3,928 82	47 91
43 50	54	797 00	9 84	152 50	1 88	3,675 07	45 37
35 00	34	1,348 50	13 22	278 40	2 73	4,030 34	39 51
56 00	65	-	-	139 00	1 62	3,307 69	38 46
16 20	28	458 15	7 90	252 20	4 35	2,973 26	51 26
-	-	191 00	2 69	50 00	70	2,690 43	37 89
12 20	15	1,442 50	18 26	170 00	2 15	4,117 69	52 12
25 00	26	107 00	1 13	15 73	15	2,816 68	29 65
60 00	79	213 60	2 81	45 88	60	3,147 94	41 42
15 00	21	357 00	5 10	891 17	12 73	4,091 79	58 45
25 00	36	269 20	3 90	93 50	1 35	2,580 02	37 39
4 00	09	666 00	13 88	408 00	8 50	2,535 72	52 82
-	-	48 00	84	123 00	2 16	2,951 51	51 78
20 00	29	442 00	6 50	133 55	1 96	2,855 98	42 00
-	-	-	-	131 51	1 46	3,777 84	41 97
21 00	27	204 25	2 65	340 00	4 42	3,254 46	42 26
10 00	15	630 00	9 69	320 57	4 93	2,940 27	45 23
5 00	09	1,311 45	23 42	248 25	4 43	3,965 39	70 81
-	-	-	-	358 07	7 31	2,782 54	56 79

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
284	Princeton,	-	-	-
285	Dover,	\$25 00	-	\$25 00
286	Royalston,	-	\$85 36	85 36
287	Granville,	-	-	-
288	Bolton,	-	-	-
289	Granby,	574 59	7 51	582 10
290	Peterham,	-	-	-
291	Bernardston,	-	-	-
292	Dana,	-	210 30	210 30
293	Leverett,	-	-	-
294	Boxford,	2,975 66	118 86	3,094 52
295	Blandford,	-	-	-
296	Boylston,	-	-	-
297	Truro,	-	-	-
298	Richmond,	-	-	-
299	Hampden,	-	-	-
300	New Salem,	-	-	-
301	Cummington,	-	-	-
302	Brewster,	-	-	-
303	Egremont,	-	-	-
304	Burlington,	795 53	5 96	801 49
305	Worthington,	-	-	-
306	Sandisfield,	25 00	-	25 00
307	Plympton,	-	-	-
308	Oakham,	-	-	-
309	Carlisle,	-	-	-
310	Halifax,	-	-	-
311	Chesterfield,	-	-	-
312	Eastham,	-	-	-
313	Savoy,	-	-	-
314	Wendell,	-	-	-
315	Otis,	-	-	-
316	Warwick,	-	-	-
317	Pelham,	-	-	-
318	Hancock,	-	-	-
319	New Braintree,	-	-	-
320	Rowe,	-	-	-
321	Greenwich,	-	160 00	160 00
322	West Tisbury,	-	-	-
323	Phillipston,	-	-	-
324	Hawley,	-	-	-
325	Westhampton,	-	-	-
326	Paxton,	323 00	-	323 00
327	Dunstable,	-	-	-
328	Plainfield,	-	-	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING TOWN FISCAL YEAR.		Expenditures for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 25, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$5,124 12	\$1,514 05	\$1,236 84	-	\$1,220 05	-
11,744 47	206 00	4,647 03	-	-	-
4,107 58	2,141 48	-	-	942 04	\$46 71
3,636 53	1,741 54	-	\$10 00	942 04	-
4,528 63	2,859 85	1,831 49	-	1,370 06	-
4,043 82	2,492 86	1,852 59	-	1,370 05	-
8,420 41	2,962 87	3,840 93	50 00	1,220 05	-
1,762 78	2,970 26	1,582 77	-	1,377 55	327 55
2,121 12	2,121 12	-	-	1,377 55	-
1,865 77	2,163 80	-	-	1,570 05	-
3,002 50	1,324 65	221 00	-	685 03	-
2,631 83	2,106 16	-	-	942 04	-
4,615 92	2,509 48	-	-	1,370 06	-
1,847 94	1,623 94	-	-	1,142 04	-
3,019 05	1,672 46	-	-	835 03	151 18
1,808 46	2,876 13	-	-	1,302 55	-
2,956 67	2,644 58	1,718 97	-	1,377 55	-
2,026 04	2,553 37	-	-	1,110 03	-
3,776 64	1,663 04	1,913 40	-	942 04	481 04
1,154 45	1,909 18	-	-	500 00	128 89
3,063 52	1,780 60	-	-	835 03	-
2,180 35	2,641 05	505 80	-	1,377 55	1,508 54
1,866 98	1,539 88	-	16 00	575 00	-
1,200 00	1,283 70	-	-	1,035 03	-
1,183 77	2,584 42	-	-	1,302 55	-
2,053 12	1,560 50	-	-	1,217 04	1,230 48
2,568 14	1,144 88	-	-	1,102 55	-
1,739 66	1,816 05	-	-	1,377 55	150 00
1,861 36	2,223 53	-	-	1,570 05	-
1,321 60	1,861 88	-	-	1,377 55	-
1,910 76	1,054 70	-	-	500 00	-
1,467 88	1,222 55	-	-	1,377 55	1,445 90
3,000 00	1,572 50	-	-	1,570 05	681 05
1,530 21	981 50	-	-	1,302 55	1,065 00
1,016 16	1,947 03	-	-	1,302 55	723 35
1,607 19	2,450 43	-	-	1,302 55	-
1,455 34	1,215 36	-	-	1,377 55	1,377 55
805 00	1,739 55	-	-	1,142 04	633 69
690 24	1,812 04	412 02	-	1,370 05	-
1,325 05	1,622 46	-	-	1,217 04	161 40
1,325 35	2,177 46	-	-	1,377 55	-
1,000 00	2,209 80	-	-	1,142 04	1,813 10
1,486 68	1,524 61	-	-	1,035 03	-
2,311 43	1,422 68	-	-	1,570 05	-
937 15	1,775 02	-	-	1,217 04	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Population — United States Census of 1910.	Valuation — April 1, 1912.	Number of public schools.	SCHOOL CENSUS DATA SEPT. 1, 1912.	
					Number of persons in towns between 6 and 15 years of age.	Number of persons in towns between 7 and 14 years of age.
329	Windsor, . . .	404	\$304,430	6	76	47
330	Florida, . . .	395	207,490	5	70	58
331	Monterey, . . .	388	344,103	3	59	49
332	Tyringham, . . .	382	364,441	4	59	44
333	Leyden, . . .	363	197,074	5	89	62
334	Middlefield, . . .	354	227,829	7	88	65
335	Heath, . . .	346	203,477	4	64	54
336	Wales, . . .	345	291,371	2	53	39
337	Prescott, . . .	320	204,456	4	60	50
338	Boxborough, . . .	317	291,021	4	81	52
339	Chilmark, . . .	282	367,279	2	35	27
340	Goshen, . . .	279	208,529	3	46	37
341	Washington, . . .	277	303,657	4	38	36
342	Alford, . . .	275	184,863	3	49	38
343	Mashpee, . . .	270	247,250	2	49	42
344	Shutesbury, . . .	267	270,480	3	48	35
345	Monroe, . . .	246	173,269	4	31	24
346	Peru, . . .	237	145,435	3	22	19
347	Montgomery, . . .	217	152,367	3	37	27
348	Tolland, . . .	180	251,902	1	38	26
349	Gay Head, . . .	162	44,036	1	31	25
350	Gosnold, . . .	152	724,540	1	13	10
351	Holland, . . .	145	110,659	1	13	10
352	Mount Washington, . . .	110	111,810	2	11	7
353	New Ashford, . . .	92	56,480	1	19	13
	Totals, . . .	417,205	\$446,463,113	2,342	72,669	53,664
	State, . . .	3,366,416	\$4,249,699,855	12,546	586,333	425,949

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

SCHOOL MEMBERSHIP, ATTENDANCE AND GRADUATION DATA FOR THE SCHOOL YEAR.

Number of different pupils of all ages in the public schools during the school year.	Number of different pupils within the year under 5 years of age.	Number of different pupils within the year over 15 years of age.	Number of different pupils within the year between 7 and 14 years of age.	Average membership of all the schools.	Number of pupils attending schools in other towns or cities.	Average attendance of all the schools.	Percentage of attendance based on average membership.	Number graduated from grammar schools.
78	-	-	50	68	8	61	90	2
71	-	2	57	61	5	57	94	1
59	-	3	56	47	2	41	87	-
55	1	-	48	50	2	47	94	-
89	-	1	76	71	1	64	89	5
124	1	7	84	98	3	88	89	3
61	-	-	54	64	4	61	96	5
62	-	-	57	52	-	47	90	4
64	-	3	53	57	9	52	91	3
78	3	-	49	70	16	63	90	2
31	2	-	23	24	3	22	93	-
55	-	2	50	44	3	42	96	5
37	-	-	29	37	2	33	89	3
43	-	-	37	41	3	37	89	-
38	-	-	31	37	1	34	92	1
47	-	1	38	39	-	35	90	2
37	-	1	27	36	2	34	95	-
31	1	2	27	19	7	17	91	1
34	1	-	27	30	5	27	90	2
27	-	1	22	23	1	22	94	1
39	-	8	25	32	-	30	95	2
14	-	1	10	13	-	12	94	-
18	2	-	12	13	-	12	95	2
15	-	-	9	10	2	10	98	-
19	-	-	15	17	-	14	84	-
71,055	349	6,646	51,633	66,857	1,834	61,857	92	3,946
557,211	8,104	61,097	354,005	501,983	1,833	466,686	93	28,656

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	TEACHERS.						Average number of months public schools have been kept during the year.
		NUMBER OF TEACHERS REQUIRED BY THE PUBLIC SCHOOLS.		NUMBER OF TEACHERS WHO HAVE GRADUATED FROM COLLEGE.		Number of teachers who have graduated from normal schools.		
		Men.	Women.	In elementary schools.	In high schools.			
329	Windsor,	-	6	-	-	1	8	
330	Florida,	-	5	-	-	1	8	
331	Monterey,	-	3	-	-	1	8-18	
332	Tyringham,	-	4	1	-	-	8-4	
333	Leyden,	-	5	-	-	2	8-18	
334	Middlefield,	-	7	-	-	5	8-14	
335	Heath,	-	3	-	-	-	8-8	
336	Wales,	-	2	-	-	-	8-12	
337	Prescott,	-	4	-	-	2	8-10	
338	Boxborough,	-	4	-	-	3	8-18	
339	Chilmark,	1	2	1	-	1	8-16	
340	Goshen,	-	3	-	-	1	8-10	
341	Washington,	-	4	-	-	2	9-5	
342	Alford,	-	3	-	-	3	9-4	
343	Masspee,	1	1	1	-	1	8-3	
344	Shutesbury,	-	3	-	-	2	8-16	
345	Monroe,	-	4	-	-	3	8-15	
346	Peru,	-	3	-	-	-	8-11	
347	Montgomery,	-	3	-	-	2	8-16	
348	Tolland,	-	1	-	-	1	9-5	
349	Gay Head,	1	1	1	-	1	8-17	
350	Gosnold,	1	-	-	-	-	9	
351	Holland,	-	1	-	-	1	9-2	
352	Mount Washington,	-	2	-	-	2	9-11	
353	New Ashford,	-	1	-	-	-	8-17	
	Totals,	218	2,563	54	392	1,258	8-18	
	State,	1,687	15,292	561	2,136	9,037	9-4	

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

HIGH SCHOOLS.

Number of high schools.	Length of high school year.	Number of teachers.	NUMBER OF PUPILS.		NUMBER OF PUPILS ADMITTED TO THE FRESHMAN CLASS.		NUMBER OF GRADUATES.	
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
142	9-8	475	3,701	4,812	1,433	1,593	465	829
271	9-9	2,813	33,001	38,582	12,139	13,240	4,002	5,679

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	Average membership of all the schools.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
			SCHOOL COMMITTEE.			
			Salaries.	Cost per pupil in average membership.	Other expenses.	Cost per pupil in average membership.
329	Windsor,	68	\$40 00	\$0 59	\$15 26	\$0 23
330	Florida,	61	45 00	74	15 75	26
331	Monterey,	47	42 00	90	6 00	13
332	Tyringham,	50	45 00	90	-	-
333	Leyden,	71	35 00	50	-	-
334	Middlefield,	98	20 00	20	6 73	07
335	Heath,	64	46 15	72	11 14	18
336	Wales,	52	-	-	3 50	07
337	Prescott,	57	33 00	58	29 75	52
338	Boxborough,	70	25 00	36	-	-
339	Chilmark,	24	42 00	1 75	3 00	13
340	Goshen,	44	15 00	35	6 76	15
341	Washington,	37	14 80	40	8 50	23
342	Alford,	41	-	-	-	-
343	Mashpee,	37	32 00	87	14 93	40
344	Shutesbury,	39	40 00	1 03	22 97	58
345	Monroe,	36	23 00	64	5 08	14
346	Peru,	19	30 00	1 58	10 28	54
347	Montgomery,	30	14 00	47	9 00	30
348	Tolland,	23	55 00	2 39	10 00	43
349	Gay Head,	32	15 00	47	2 00	06
350	Gosnold,	13	30 00	2 31	11 25	86
351	Holland,	13	-	-	46 50	3 58
352	Mount Washington,	10	20 00	2 00	-	-
353	New Ashford,	17	30 00	1 77	28 64	1 68
	Totals,	66,857	\$18,826 53	\$0 21	\$8,674 46	\$0 13
	State,	501,983	\$148,933 63	\$0 29	\$158,321 20	\$0 32

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

SUPERINTENDENCE OF SCHOOLS AND ENFORCEMENT OF LAW.				SUPERVISORS.			
Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.	Salaries.	Cost per pupil in av- erage membership.	Other expenses.	Cost per pupil in av- erage membership.
\$375 00	\$5 52	\$10 28	\$0 15	-	-	-	-
300 00	4 92	16 24	27	-	-	-	-
320 00	6 81	-	-	-	-	-	-
192 00	3 84	3 40	07	-	-	-	-
360 00	5 07	11 76	16	\$60 00	\$0 85	\$5 74	\$0 08
309 43	3 16	20 08	21	-	-	-	-
165 00	2 58	10 53	16	80 00	1 25	-	-
230 97	4 44	-	-	195 94	3 75	-	-
331 12	5 81	7 71	14	-	-	-	-
129 00	1 85	-	-	74 00	1 06	-	-
160 00	6 67	11 45	48	-	-	-	-
175 10	3 98	12 09	28	-	-	-	-
303 12	8 19	5 00	14	-	-	-	-
252 64	6 16	9 80	24	206 25	5 03	-	-
151 25	4 09	10 85	29	22 22	60	-	-
256 25	6 57	5 03	13	-	-	-	-
290 15	8 06	13 05	36	-	-	-	-
225 00	11 84	9 40	49	-	-	-	-
155 16	5 17	-	-	-	-	-	-
170 00	7 39	125 00	5 43	-	-	-	-
80 00	2 50	10 52	33	-	-	-	-
-	-	15 20	1 17	-	-	-	-
90 20	6 94	-	-	138 40	10 65	-	-
160 00	16 00	-	-	-	-	-	-
75 00	4 41	2 50	15	-	-	-	-
\$138,999 21	\$2 08	\$7,113 14	\$0 11	\$53,608 64	\$0 81	\$1,104 44	\$0 02
\$437,174 77	\$0 87	\$111,900 54	\$0 22	\$387,464 29	\$0 77	\$12,748 95	\$0 03

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.			
		Principals' salaries.	Cost per pupil in average membership.	Teachers' salaries.	Cost per pupil in average membership.
329	Windsor,	-	-	\$1,060 00	\$28 82
330	Florida,	-	-	1,573 00	25 79
331	Monterey,	-	-	1,185 00	25 21
332	Tyringham,	-	-	1,378 00	27 56
333	Leyden,	-	-	1,902 80	26 80
334	Middlefield,	-	-	2,787 50	28 44
335	Heath,	-	-	1,113 50	17 40
336	Wales,	-	-	891 00	17 13
337	Prescott,	-	-	1,434 00	25 16
338	Boxborough,	-	-	1,651 20	23 59
339	Chilmark,	-	-	1,125 00	46 87
340	Goshen,	-	-	1,196 00	27 18
341	Washington,	-	-	1,838 00	49 67
342	Alford,	-	-	1,352 80	32 99
343	Mashpee,	\$540 00	\$14 60	431 80	11 67
344	Shutesbury,	-	-	1,101 30	28 24
345	Monroe,	-	-	1,243 00	34 53
346	Peru,	-	-	1,262 00	66 42
347	Montgomery,	-	-	1,255 50	41 85
348	Tolland,	-	-	487 50	21 20
349	Gay Head,	-	-	1,089 80	34 06
350	Gosnold,	-	-	540 00	41 54
351	Holland,	-	-	508 20	39 09
352	Mount Washington,	-	-	975 00	97 50
353	New Ashford,	-	-	496 00	29 18
	Totals,	\$247,921 47	\$3 70	\$1,133,902 81	\$16 96
	State,	\$1,647,827 38	\$3 28	\$11,899,673 12	\$23 70

SCHOOL RETURNS.

cxi.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Text-books.	Cost per pupil in average membership.	Stationery, supplies and miscellaneous.	Cost per pupil in average membership.	Janitors' service.	Cost per pupil in average membership.	Fuel.	Cost per pupil in average membership.
\$140 12	\$2 06	\$183 46	\$2 69	\$37 80	\$0 55	\$58 65	\$0 86
30 97	51	81 93	1 34	46 25	76	35 75	58
84 50	1 80	55 28	1 18	20 00	43	105 40	2 24
37 76	75	51 01	1 02	42 34	85	108 85	2 17
29 24	41	57 44	81	52 81	74	87 55	1 23
61 96	63	55 42	57	69 50	71	134 75	1 37
27 82	43	21 38	33	21 00	33	86 84	1 36
34 77	67	72 83	1 40	95 00	1 83	81 33	1 56
44 19	80	32 08	56	47 55	83	34 25	60
40 00	57	60 39	86	22 75	32	93 50	1 34
46 27	1 92	56 17	2 34	72 00	3 00	47 00	1 96
116 46	2 64	67 10	1 53	43 05	98	17 50	40
60 06	1 63	56 85	1 54	37 00	1 00	58 05	1 57
2 88	07	19 51	48	74 42	1 82	3 75	09
12 00	33	26 96	73	164 10	4 44	73 82	1 99
8 31	21	37 61	96	32 00	82	32 79	84
30 62	85	156 87	4 36	37 00	1 03	148 05	4 11
106 63	5 61	79 66	4 19	16 00	84	64 12	3 37
33 97	1 13	2 70	09	19 00	1 63	12 50	42
47 79	2 08	27 79	1 21	11 50	50	24 50	1 07
160 13	5 00	60 63	1 89	84 02	2 62	37 60	1 17
—	—	64 69	4 97	18 00	1 39	25 50	1 96
11 50	80	17 71	1 36	28 50	2 19	8 62	66
15 97	1 60	65 02	6 50	34 45	3 45	109 50	10 95
2 17	13	33 13	1 95	42 90	2 52	27 25	1 60
\$69,985 89	\$1 06	\$76,767 59	\$1 15	\$154,840 76	\$2 32	\$164,115 16	\$2 45
\$476,059 38	\$0 95	\$603,037 19	\$1 20	\$1,390,021 24	\$2 77	\$967,513 02	\$1 93

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

		EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.					
		Miscellaneous expenses of operation.	Cost per pupil in average membership.	Repairs, replacement and upkeep.	Cost per pupil in average membership.	Libraries.	Cost per pupil in average membership.
329	Windsor,	-	-	\$157 05	\$2 31	-	-
330	Florida,	\$2 45	\$0 04	121 90	2 00	-	-
331	Monterey,	29 74	63	522 06	11 11	-	-
332	Tyringham,	6 00	12	25 95	52	-	-
333	Leyden,	5 42	08	24 75	35	-	-
334	Middlefield,	-	-	173 61	1 77	-	-
335	Heath,	-	-	107 83	1 68	-	-
336	Wales,	10 25	20	43 25	83	-	-
337	Prescott,	2 11	04	42 92	75	-	-
338	Boxborough,	100 47	1 44	67 61	96	-	-
339	Chilmark,	15 62	65	7 92	33	-	-
340	Goshen,	-	-	92 32	2 10	-	-
341	Washington,	5 00	13	4 35	12	\$6 00	\$0 16
342	Alford,	26 05	63	7 58	18	-	-
343	Mashpee,	-	-	32 83	89	-	-
344	Shutesbury,	4 75	12	19 73	51	-	-
345	Monroe,	-	-	23 21	64	-	-
346	Peru,	2 00	11	111 81	5 89	-	-
347	Montgomery,	17 00	57	45 87	1 53	-	-
348	Tolland,	30	01	33 00	1 43	-	-
349	Gay Head,	41 25	1 29	15 00	47	-	-
350	Gosnold,	-	-	-	-	-	-
351	Holland,	2 00	15	-	-	-	-
352	Mount Washington,	5 96	60	-	-	-	-
353	New Ashford,	2 85	17	13 40	79	-	-
Totals,		\$28,463 70	\$0 43	\$106,809 52	\$1 59	\$274 63	-
State,		\$258,428 80	\$0 51	\$865,079 07	\$1 72	\$2,169 23	-

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913 — *Con.*

Promotion of health.	Cost per pupil in average membership.	Transportation.	Cost per pupil in average membership.	Miscellaneous expenses.	Cost per pupil in average membership.	Total expenditure for the support of public schools, being the total of items in the eighteen preceding columns.	Cost per pupil in average membership.
\$25 00	\$0 37	\$351 50	\$5 17	\$318 00	\$4 68	\$3,672 12	\$54 00
46 50	76	7 00	11	143 50	2 35	2,466 24	40 43
-	-	420 90	8 95	102 50	2 18	2,893 38	61 56
20 00	40	41 65	83	33 75	67	1,985 71	39 71
30 00	42	-	-	50 60	71	2,713 11	38 21
40 00	41	-	-	86 00	88	3,764 98	38 42
25 00	39	862 05	13 46	138 00	2 16	2,716 24	42 44
25 00	48	586 40	11 28	-	-	2,270 24	43 66
2 00	04	532 60	9 34	404 56	7 10	2,977 84	52 24
10 00	14	484 09	6 92	837 00	11 96	3,595 01	51 36
-	-	30 00	1 25	305 49	12 73	1,921 92	80 08
6 00	13	300 80	6 83	115 00	2 61	2,163 18	49 16
10 00	27	-	-	219 00	5 92	2,625 73	70 97
15 00	37	-	-	36 00	88	2,006 68	48 94
15 00	41	58 50	1 58	123 35	3 33	1,709 61	46 20
19 10	49	351 00	9 00	20	01	1,931 04	49 52
42 50	1 18	90 75	2 52	93 30	2 59	2,196 58	61 02
10 00	53	161 90	8 52	293 50	15 45	2,382 30	125 38
10 00	33	453 60	15 12	211 25	7 04	2,239 55	74 65
6 00	26	877 05	38 13	35 33	1 54	1,910 76	83 08
-	-	-	-	23 48	73	1,619 53	50 61
-	-	-	-	-	-	704 64	54 20
15 00	1 15	497 30	38 25	41 00	3 15	1,404 93	108 07
10 00	1 00	-	-	100 00	10 00	1,495 90	149 90
5 00	29	194 00	11 41	-	-	952 84	56 05
\$15,081 87	\$0 23	\$249,774 79	\$3 74	\$115,432 57	\$1 73	\$2,591,497 18	\$38 76
\$133,137 63	\$0 27	\$384,149 45	\$0 77	\$400,992 67	\$0 80	\$20,284,631 56	\$40 41

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

	TOWNS.	EXPENDITURES FOR OUTLAY FOR SCHOOL FISCAL YEAR ENDING JUNE 30, 1913.		
		New grounds, buildings and alterations.	New equipment.	Total expenditure for outlay, being the total of the two preceding columns.
329	Windsor,	-	-	-
330	Florida,	-	-	-
331	Monterey,	-	-	-
332	Tyringham,	-	-	-
333	Leyden,	-	-	-
334	Middlefield,	-	-	-
335	Heath,	-	-	-
336	Wales,	-	-	-
337	Prescott,	-	-	-
338	Boxborough,	-	-	-
339	Chilmark,	-	-	-
340	Goshen,	-	-	-
341	Washington,	-	-	-
342	Alford,	-	-	-
343	Mashpee,	-	-	-
344	Shutesbury,	-	-	-
345	Monroe,	-	-	-
346	Peru,	-	-	-
347	Montgomery,	-	-	-
348	Tolland,	-	-	-
349	Gay Head,	-	-	-
350	Gosnold,	-	-	-
351	Holland,	-	-	-
352	Mount Washington,	-	-	-
353	New Ashford,	-	-	-
	Totals,	\$381,443 35	\$22,906 26	\$404,349 61
	State,	\$2,863,941 90	\$310,822 93	\$3,174,764 83

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1912-13 — *Con.*

EXPENDITURES FOR SUPPORT OF PUBLIC SCHOOLS FOR LAST PRECEDING TOWN FISCAL YEAR.		Expenditures for high school sup- port for school fiscal year ending June 30, 1913.	Voluntary contributions.	Town's share of State School Fund income paid Jan. 26, 1913.	Unexpended balance of State School Fund income at end of town fiscal year.
From local taxation.	From other sources.				
\$1,860 10	\$1,706 99	-	-	\$1,645 05	\$504 98
889 52	1,525 76	-	-	1,645 05	-
1,512 20	1,164 20	-	-	1,035 03	846 89
1,178 21	812 50	-	-	500 00	-
800 00	1,897 87	-	-	1,302 55	1,197 94
1,443 94	2,278 61	-	-	1,570 05	-
1,398 44	1,307 44	-	-	1,302 55	238 82
769 74	1,294 40	-	-	1,035 03	1,135 03
651 21	2,248 23	-	-	1,302 55	1,302 55
1,295 10	2,102 91	-	-	1,570 06	596 63
1,017 61	850 79	-	-	500 00	474 15
615 00	1,506 72	-	-	1,035 03	285 51
1,073 72	1,594 62	\$171 00	-	1,142 04	945 65
560 00	1,539 44	-	-	1,035 03	1,079 61
1,029 02	883 00	-	-	1,110 03	-
960 78	715 50	-	-	500 00	334 45
705 44	1,497 97	-	-	1,302 55	885 98
649 08	1,720 31	-	-	1,377 55	228 68
600 00	1,541 68	-	-	1,302 55	704 86
616 76	1,196 22	-	\$25 00	1,142 04	100 82
150 00	1,262 08	-	-	1,142 04	738 14
350 00	300 00	-	-	300 00	13 39
360 00	847 41	-	-	500 00	2,394 46
234 87	874 56	-	-	500 00	698 60
150 00	794 60	-	-	575 00	708 22
\$2,082,460 51	\$448,222 17	\$506,600 65	\$2,853 31	\$227,413 26	\$48,835 50
\$18,896,008 05	\$635,239 18	\$4,292,395 72	\$21,406 84	\$228,558 32	\$48,835 50

EVENING SCHOOLS.

Table showing the number and location of public evening schools kept during the school year 1912-13, and cost of their maintenance.

CITIES AND TOWNS.	Number of schools.	ATTENDANCE.			Average number of evenings.	Number of teachers.	Expense.
		Males.	Females.	Average.			
Adams,	9	87	109	142	42	10	\$674 00
Amesbury,	1	55	23	33	38	4	521 92
Ashburnham,	1	35	-	24	24	2	58 50
Athol,	1	71	23	41	50	6	408 31
Attleborough,	3	310	97	163	47	14	1,574 61
Beverly,	9	216	75	145	489	9	1,889 51
Boston,	28	10,193	7,753	8,217	98	424	131,489 37
Brockton,	6	1,147	1,005	1,169	60	79	11,554 24
Brookline,	3	73	170	104	59	10	2,200 03
Cambridge,	10	1,920	1,702	1,453	60	102	15,320 58
Chelsea,	1	681	369	495	80	39	6,629 38
Chicopee,	2	228	209	326	40	29	2,074 17
Clinton,	1	145	115	116	39	10	647 10
Dover,	1	6	-	2	31	1	71 61
Dudley,	1	21	13	18	50	3	240 72
Easthampton,	11	103	89	142	30	11	366 00
Everett,	2	333	328	393	60	26	4,288 03
Fall River,	67	2,172	1,302	1,665	47	178	13,373 16
Fitchburg,	5	399	128	316	70	48	4,533 75
Frammingham,	2	96	50	80	50	11	1,071 50
Gardner,	1	375	81	296	36	40	1,517 00
Gloucester,	1	99	100	51	39	3	187 30
Greenfield,	1	98	27	54	50	3	237 47
Hanover,	1	28	10	15	43	1	121 34
Haverhill,	6	485	220	591	433	44	3,853 00
Holyoke,	5	1,289	1,198	1,075	85	91	15,645 89
Hudson,	1	80	35	40	34	4	302 50
Lawrence,	5	1,448	724	1,789	72	92	15,374 21
Leominster,	1	167	49	877	48	14	811 00
Lowell,	15	2,162	1,206	1,652	70	158	24,123 64
Lynn,	3	1,343	696	865	141	57	11,018 64
Malden,	4	680	441	502	59	41	6,717 79
Marlborough,	1	67	18	73	50	6	653 25
Medford,	1	181	107	114	46	10	1,399 70
Methuen,	1	104	40	80	59	4	508 57
Milford,	1	65	247	142	36	14	856 00
Montague,	2	120	40	100	38	7	397 61
Natick,	1	114	26	88	35	6	486 00
New Bedford,	7	1,855	937	1,251	97	99	10,468 10
Newburyport,	2	260	130	182	69	11	1,366 50
Newton,	3	451	204	308	45	24	3,181 37
North Adams,	3	170	94	154	40	10	1,255 75
Northampton,	2	177	60	101	60	12	895 00
North Attleborough,	1	37	23	36	48	5	486 20
Northbridge,	9	106	37	111	45	9	605 95
Oak Bluffs,	1	14	3	11	51	2	196 40
Peabody,	1	303	55	203	42	16	955 00
Pittsfield,	12	499	160	325	53	14	1,981 54
Plymouth,	2	71	65	90	57	7	769 50

SCHOOL RETURNS.

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*Table showing the number and location of public evening schools, etc. —
Concluded.*

CITIES AND TOWNS.	Number of schools.	ATTENDANCE.			Average number of evenings.	Number of teachers.	Expense.
		Males.	Females.	Average.			
Quincy,	4	616	65	262	41	21	\$2,135 95
Revere,	1	112	36	100	78	5	546 95
Salem,	4	849	325	405	59	34	3,423 96
Somerville,	3	1,087	443	607	79	48	9,315 76
Southbridge,	4	138	103	170	39	12	746 95
South Hadley,	1	20	12	12	31	2	119 50
Springfield,	5	2,377	991	1,294	82	104	20,512 45
Stoneham,	1	52	2	34	40	6	442 58
Stoughton,	1	59	21	60	36	3	204 00
Taunton,	8	315	170	245	40	37	2,141 00
Uxbridge,	2	37	12	32	30	4	230 00
Wakefield,	5	177	82	141	60	12	1,421 30
Walpole,	4	106	36	90	20	8	441 18
Waltham,	3	318	106	241	50	17	2,501 18
Watertown,	2	251	110	222	60	15	1,306 20
Webster,	1	92	37	65	50	7	659 00
Wellesley,	5	72	40	39	55	5	996 16
Westfield,	1	173	94	177	39	10	731 99
Winthrop,	1	43	32	28	53	3	368 50
Woburn,	1	164	49	66	30	8	485 15
Worcester,	25	2,162	995	1,552	112	125	35,700 68
Totals (70 towns and cities),	340	40,359	24,367	31,962	4,529	2,306	\$389,789 15

RETURNS OF SCHOOLS IN STATE INSTITUTIONS FOR THE SCHOOL YEAR 1912-13.

STATE INSTITUTIONS.	Number of schools in the institution.	Number of different pupils of all ages during the year.	Average attendance during the year.	Number under 5 years of age attending school.	No. over 15 years of age attending school.	Number between 5 and 15 years in the institution at the end of the school year.	NUMBER OF TEACHERS DURING THE YEAR.		WAGES OF TEACHERS PER MONTH.		Length of schooling.
							Males.	Females.	Males.	Females.	
State Industrial School for Girls, Lancaster,	13	521	308	-	259	46	-	18	-	\$30 00 ¹ to \$41 67 ¹	10 mos.
Lyman School for Boys, Westborough,	8	556	285	-	241	280	\$66 66 ¹ to \$83 33	12	\$66 66 ¹ to \$83 33	\$37 50 ¹ to \$66 66	44 wks.

¹ And home.

GRADUATED TABLES.

In order to show the comparative standing of the towns and cities (1) in the taxes which they impose upon themselves for the support of their public schools, and (2) in the ratio which these taxes bear to their respective valuations, two graduated tables have been prepared.

For the sake of brevity as well as convenience of reference these tables may be named as follows:—

- I. Graduated taxation table.
- II. Graduated valuation table.

I. Graduated Taxation Table.

In this table the towns and cities are classified or ranked according to the amounts which they severally raise by local taxation for the school support of each child in the average membership of the public schools. It is the average membership that more than any other factor determines the expense of the schools, and it is the expenditure for each child in the average membership that more than any other factor determines a town's liberality in matters of school support. In some places large numbers of children between five and fifteen are in private schools; the amount raised for the public schools is correspondingly reduced. Consequently the amounts of the local tax for each child between five and fifteen in such places are relatively small. To use such amounts, however, as evidence of the economy or the parsimony of towns would be illogical and unjust.

The amounts raised for school support by local taxation for each child in town between five and fifteen years of age are also given, together with the amounts raised for school support by local taxation *plus* the State and other contributions for each child in the average membership.

II. Graduated Valuation Table.

This table exhibits for the several towns and cities the ratios which the sums raised by taxation and expended for the support of the public schools bear to their respective assessed valuations. For convenience of apprehension the ratio in each case is expressed as so many dollars of tax on a thousand dollars of valuation.

I. GRADUATED TAXATION TABLE.

Table showing for the several towns and cities of the State the comparative amounts of money expended during the last preceding town or city fiscal year for the support of public schools per child, as determined (1) by the number of children in the average membership of the public schools and (2) by the number of children between five and fifteen years of age in the town or city.

Rank according to the amount yielded for each child in the average membership of the public schools by the local tax for school support.		TOWNS AND CITIES.	AMOUNT YIELDED FOR EACH CHILD IN THE AVERAGE MEMBERSHIP OF THE PUBLIC SCHOOLS BY THE —		Amount of local tax for school support for each child between 5 and 15 years of age.
			Local tax for support.	Local tax for support plus the State and other contributions.	
1911-12.	1912-13.	State, . . .	\$37 64	\$38 91	\$32 23
1	1	Dover, . . .	105 81	107 66	87 65
2	2	Weston, . . .	80 68	80 68	83 29
5	3	Hull, . . .	78 71	78 71	68 63
6	4	Brookline, . . .	76 35	76 35	65 85
4	5	Lincoln, . . .	69 09	71 28	58 63
22	6	Longmeadow, . . .	66 89	73 92	43 12
3	7	Milton, . . .	66 29	66 29	71 17
12.	8	Harvard, . . .	62 88	74 57	44 61
7	9	Westwood, . . .	61 30	63 89	50 85
8	10	Stockbridge, . . .	60 41	61 47	57 35
11	11	Petersham, . . .	59 72	80 73	53 98
9	12	Lancaster, . . .	59 44	59 52	41 58
18	13	Acton, . . .	56 20	58 20	53 11
10	14	Wellesley, . . .	54 79	54 79	69 48
13	15	Manchester, . . .	53 53	53 53	61 81
60	16	Sharon, . . .	49 96	54 00	45 11
17	17	Newton, . . .	49 87	50 35	48 62
15	18	Lenox, . . .	49 74	50 89	51 17
32	19	Boston, . . .	49 61	49 71	40 85
20	20	Falmouth, . . .	49 47	50 35	50 36
19	21	Wayland, . . .	49 39	51 84	51 90
16	22	Cohasset, . . .	49 25	49 42	50 22
24	23	Bourne, . . .	48 79	50 09	50 92
34	24	Hardwick, . . .	47 75	50 74	35 89
30	25	Wenham, . . .	46 99	51 14	40 71
23	26	Springfield, . . .	46 43	46 43	46 19
29	27	Sudbury, . . .	46 41	57 04	46 68
44	28	Brewster, . . .	46 06	66 34	30 46
25	29	Yarmouth, . . .	45 89	60 72	50 61
21	30	Marion, . . .	45 43	45 46	42 25
14	31	Nahant, . . .	44 90	44 90	45 82
26	32	Lexington, . . .	44 57	45 77	48 81
94	33	Wrentham, . . .	44 08	51 38	46 91
33	34	Holyoke, . . .	44 08	44 21	26 80
89	35	Duxbury, . . .	44 05	46 71	39 19
41	36	Bedford, . . .	43 65	56 12	38 07
56	37	Hopedale, . . .	42 83	42 90	46 35
39	38	Hamilton, . . .	42 77	43 16	41 77
27	39	Canton, . . .	42 73	43 06	24 03

SCHOOL RETURNS.

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Table showing the comparative amounts of money expended for the support, etc. — Continued.

Rank according to the amount yielded for each child in the average membership of the public schools by the local tax for school support.		TOWNS AND CITIES.	AMOUNT YIELDED FOR EACH CHILD IN THE AVERAGE MEMBERSHIP OF THE PUBLIC SCHOOLS BY THE —		Amount of local tax for school support for each child between 5 and 15 years of age.
			Local tax for support.	Local tax for support plus the State and other contributions.	
1911-12.	1912-13.				
28	40	Barnstable,	\$42 66	\$43 45	\$43 85
236	41	Chilmark,	42 40	77 85	29 07
64	42	Amesbury,	42 36	43 34	22 94
42	43	Beverly,	42 25	42 25	46 38
128	44	Lynnfield,	41 48	51 86	34 77
61	45	Concord,	41 36	48 59	47 04
82	46	Dunstable,	41 28	66 68	31 24
148	47	Bolton,	41 17	67 17	36 52
38	48	Winchester,	41 16	42 13	40 50
69	49	Ludlow,	41 04	41 55	25 94
68	50	West Boylston,	41 01	50 49	40 65
36	51	Princeton,	40 99	53 11	37 96
62	52	Topsfield,	40 91	42 38	43 79
49	53	Scituate,	40 74	40 74	42 74
45	54	Groton,	40 70	41 11	39 49
227	55	Burlington,	39 79	62 91	33 67
97	56	Clinton,	39 43	39 43	28 46
47	57	Worcester,	39 26	39 51	35 83
55	58	Dartmouth,	39 14	39 25	28 56
52	59	Watertown,	38 80	38 80	31 94
37	60	Needham,	38 78	39 17	40 99
73	61	Southborough,	38 67	46 11	40 04
53	62	Melrose,	38 06	38 06	35 07
117	63	Littleton,	38 04	46 58	43 12
184	64	Warwick,	37 97	57 88	30 61
100	65	Webster,	37 79	38 74	13 36
40	66	Dalton,	37 31	37 39	36 89
65	67	Spencer,	37 26	38 00	22 65
123	68	Sturbridge,	37 22	44 24	30 08
35	69	Waltham,	37 18	37 20	26 82
101	70	Tyngsborough,	36 87	64 55	27 53
83	71	Swampscott,	36 45	36 45	44 43
139	72	Stoneham,	36 43	36 63	34 52
121	73	Pepperell,	36 26	40 30	34 28
57	74	Marshfield,	36 20	42 26	37 52
74	75	Malden,	36 16	36 36	30 47
80	76	Dennis,	36 13	42 51	38 54
67	77	Fitchburg,	36 08	36 29	21 67
174	78	Westport,	36 07	39 95	30 55
132	79	Russell,	36 01	47 38	32 46
46	80	Cambridge,	35 88	37 50	32 07
103	81	Southbridge,	35 83	36 01	13 19
77	82	New Bedford,	35 72	35 87	25 08
136	83	Andover,	35 62	38 79	32 77
43	84	Lawrence,	35 57	35 57	22 20
75	85	Dedham,	35 43	37 19	37 12
137	86	Dracut,	35 35	36 84	28 01
51	87	Lowell,	35 27	35 27	26 75
208	88	Mansfield,	35 27	35 35	38 76
173	89	Braintree,	35 26	35 68	34 00
106	90	Somerville,	35 15	35 20	33 41
79	91	Arlington,	35 09	35 70	35 95
99	92	North Adams,	34 93	35 47	23 82
109	93	Leominster,	34 91	35 15	24 16
105	94	Marlborough,	34 88	35 54	25 10
150	95	Peabody,	34 83	35 19	29 19

Table showing the comparative amounts of money expended for the support,
etc. — Continued.

Rank according to the amount yielded for each child in the average membership of the public schools by the local tax for school support.		TOWNS AND CITIES.	AMOUNT YIELDED FOR EACH CHILD IN THE AVERAGE MEMBERSHIP OF THE PUBLIC SCHOOLS BY THE —		Amount of local tax for school support for each child between 5 and 15 years of age.
			Local tax for support.	Local tax for support plus the State and other contributions.	
1911-12.	1912-12.				
50	96	Haverhill,	\$34 82	\$35 20	\$28 05
86	97	Walpole,	34 66	35 37	36 52
71	98	Attleborough,	34 65	35 13	29 85
63	99	Belmont,	34 59	34 71	33 75
88	100	Chelmsford,	34 49	34 49	30 33
76	101	Montague,	34 44	35 10	32 37
124	102	North Attleborough,	34 34	34 34	33 55
72	103	Carver,	34 31	43 98	33 46
85	104	Winthrop,	34 27	34 36	37 42
95	105	Williamstown,	34 21	35 16	34 40
180	106	Peru,	34 16	124 70	29 50
141	107	Chatham,	34 08	40 63	34 25
92	108	Fall River,	34 02	34 70	23 36
115	109	North Andover,	34 00	34 02	34 39
48	110	Wilbraham,	33 88	47 90	23 81
113	111	Lynn,	33 72	33 83	29 10
78	112	Salem, ¹	33 66	33 66	22 12
84	113	Northampton,	33 64	34 35	28 01
130	114	Tewksbury,	33 27	44 52	26 43
59	115	Hingham,	33 23	35 70	37 51
98	116	Barre,	33 21	38 02	30 43
90	117	Norwood,	33 19	33 37	35 92
273	118	Hadley,	33 14	47 48	29 56
114	119	Natick,	33 08	33 08	37 23
166	120	Orange,	33 04	33 04	36 02
108	121	Wareham,	32 94	33 41	31 89
329	122	Wendell,	32 94	51 13	22 75
91	123	Medford,	32 90	33 03	36 02
172	124	West Newbury,	32 86	42 45	32 57
104	125	Everett,	32 82	32 89	33 31
133	126	Greenfield,	32 71	32 71	34 45
120	127	Taunton,	32 46	33 13	27 93
134	128	Shirley,	32 21	44 14	18 04
274	129	Monterey,	32 17	56 73	25 63
171	130	Newburyport,	32 07	33 39	28 35
96	131	Norfolk,	31 95	44 57	29 10
168	132	Billerica,	31 91	32 89	27 56
119	133	Framingham,	31 89	32 38	35 38
70	134	Pembroke,	31 80	43 59	32 98
127	135	Norwell,	31 78	41 63	32 40
191	136	Hopkinton,	31 67	37 71	30 98
157	137	Ashby,	31 66	47 99	28 39
158	138	Pittsfield,	31 64	31 98	30 67
122	139	Plainville,	31 62	42 10	32 75
87	140	Westford,	31 54	35 44	33 68
142	141	Nantucket,	31 46	31 46	35 40
279	142	Richmond,	31 45	48 87	27 45
156	143	Quincy,	31 44	31 50	21 49
177	144	Sherborn,	31 35	43 36	36 02
102	145	Halifax,	31 32	45 28	30 57
188	146	Harwich,	31 28	36 87	28 06
145	147	Ipswich,	31 21	32 75	36 02
107	148	Ware,	31 18	31 58	21 74
110	149	Chicopee,	31 15	31 19	27 92
118	150	Shrewsbury,	31 13	36 32	29 85

¹ Financial returns cover a period of eleven months only.

SCHOOL RETURNS.

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Table showing the comparative amounts of money expended for the support, etc. — Continued.

Rank according to the amount yielded for each child in the average membership of the public schools by the local tax for school support.		TOWNS AND CITIES.	AMOUNT YIELDED FOR EACH CHILD IN THE AVERAGE MEMBERSHIP OF THE PUBLIC SCHOOLS BY THE —		Amount of local tax for school support for each child between 5 and 15 years of age.
			Local tax for support.	Local tax for support plus the State and other contributions.	
1911-12.	1912 13.				
147	151	Wakefield,	\$31 03	\$31 94	\$33 85
54	152	Boylston,	30 98	47 82	27 48
93	153	West Brookfield,	30 97	48 04	25 26
131	154	Newbury,	30 96	41 24	29 18
135	155	Mattapoisett,	30 87	38 68	26 95
152	156	Sandwich,	30 82	38 98	31 72
288	157	Granville,	30 82	45 58	25 25
155	158	Easton,	30 78	34 96	34 73
183	159	Gloucester,	30 77	31 00	31 29
224	160	Oak Bluffs,	30 70	32 68	24 85
197	161	Franklin,	30 70	31 29	31 42
138	162	Great Barrington,	30 58	31 69	41 26
151	163	Grafton,	30 57	31 74	27 73
111	164	Reading,	30 48	32 70	33 80
198	165	Millbury,	30 38	31 25	26 76
140	166	Dudley,	30 36	34 54	15 87
219	167	Adams,	30 30	30 74	21 12
175	168	Rockland,	30 16	30 60	31 34
167	169	Wellfleet,	30 13	42 11	31 78
176	170	Oxford,	30 13	33 69	25 33
144	171	Warren,	29 96	35 62	20 80
112	172	Brockton,	29 93	30 39	33 81
159	173	Plymouth,	29 83	29 83	29 37
263	174	Orleans,	29 79	42 89	31 50
129	175	Northborough,	29 70	37 88	27 64
153	176	Gardner,	29 64	29 64	22 21
209	177	Edgartown,	29 64	39 12	33 11
195	178	Leicester,	29 55	32 25	28 45
252	179	Maynard,	29 31	29 31	34 38
126	180	Granby,	29 30	47 37	28 88
200	181	Westborough,	29 26	29 53	32 17
164	182	Bridgewater,	29 25	30 56	33 59
193	183	North Brookfield,	29 05	36 13	20 42
181	184	Whitman,	29 02	30 14	31 42
81	185	Washington,	29 02	72 12	28 26
189	186	New Salem,	28 99	54 91	28 71
161	187	Hudson,	28 95	29 81	27 92
165	188	Marblehead,	28 83	28 83	30 48
186	189	Danvers,	28 80	30 05	31 31
292	190	Acushnet,	28 67	40 84	19 33
213	191	Palmer,	28 61	28 61	26 76
169	192	Holden,	28 48	33 41	27 30
170	193	Westfield,	28 45	31 87	25 39
149	194	Ashland,	28 40	35 06	33 82
203	195	New Marlborough,	28 38	40 83	24 82
202	196	Lee,	28 23	32 13	21 44
262	197	Carlisle,	28 12	49 50	25 35
238	198	Winchendon,	28 08	37 05	26 40
221	199	Boxford,	28 06	40 44	24 81
272	200	Holliston,	27 96	31 57	28 08
190	201	Revere,	27 92	27 94	28 40
178	202	Weymouth,	27 89	27 89	30 20
277	203	Mashpee,	27 81	51 68	21 00
187	204	Easthampton,	27 80	29 42	22 26
206	205	South Hadley,	27 79	29 39	27 52

BOARD OF EDUCATION.

Table showing the comparative amounts of money expended for the support, etc. — Continued.

Rank according to the amount yielded for each child in the average membership of the public schools by the local tax for school support.		TOWNS AND CITIES.	AMOUNT YIELDED FOR EACH CHILD IN THE AVERAGE MEMBERSHIP OF THE PUBLIC SCHOOLS BY THE —		Amount of local tax for school support for each child between 5 and 15 years of age.
			Local tax for support.	Local tax for support plus the State and other contributions.	
1911-12.	1912-13.				
215	206	Monson,	\$27 70	\$31 96	\$27 19
271	207	Holland,	27 69	92 88	27 69
66	208	Townsend,	27 63	35 77	26 90
162	209	Chelsea,	27 61	27 61	25 06
160	210	Deerfield,	27 58	32 85	22 60
217	211	Northbridge,	27 55	27 57	26 18
31	212	Shelburne,	27 51	35 99	38 39
244	213	Foxborough,	27 49	30 23	29 79
259	214	Medfield,	27 41	34 45	32 29
234	215	Merrimac,	27 36	32 30	31 07
143	216	Windsor,	27 35	52 46	24 47
179	217	Bellingham,	27 30	39 52	22 97
280	218	Royalston,	27 20	41 38	25 36
163	219	Sunderland,	26 94	43 45	20 23
352	220	Gosnold,	26 92	50 00	26 92
212	221	Hanover,	26 90	31 31	27 45
58	222	Tolland,	26 82	78 83	16 23
207	223	Hanson,	26 81	33 12	24 76
204	224	Amherst,	26 81	28 40	29 01
261	225	Athol,	26 77	27 96	24 00
328	226	North Reading,	26 68	45 23	21 01
210	227	Charlemont,	26 62	45 12	27 44
216	228	Lunenburg,	26 61	34 84	24 99
240	229	Westminster,	26 60	35 80	23 30
282	230	Rowley,	26 49	38 19	24 47
218	231	Woburn,	26 25	26 82	22 22
185	232	Middleborough,	26 18	27 52	27 01
256	233	Stoughton,	26 10	26 42	21 69
116	234	Abington,	26 06	27 03	31 08
194	235	Saugus,	25 98	26 07	26 73
196	236	Millis,	25 77	32 89	25 27
223	237	Dana,	25 68	50 41	22 12
233	238	Wilmington,	25 45	30 21	27 33
229	239	Brookfield,	25 35	31 58	22 72
220	240	Ashburnham,	25 33	29 77	23 08
228	241	Northfield,	25 32	33 77	26 95
284	242	Blandford,	25 31	45 56	19 79
214	243	Kingston,	25 29	29 61	25 91
243	244	Enfield,	25 29	42 24	26 03
251	245	Georgetown,	25 18	31 68	19 00
235	246	Charlton,	25 11	31 77	21 65
226	247	West Springfield,	25 09	26 46	27 16
249	248	Groveland,	25 04	29 40	25 23
231	249	Mendon,	25 00	38 00	25 31
255	250	Agawam,	24 88	27 82	19 97
211	251	Milford,	24 85	25 45	19 77
285	252	Rutland,	24 81	34 16	28 82
241	253	Ayer,	24 77	28 09	27 60
192	254	Dighton,	24 69	29 20	22 14
146	255	Lakeville,	24 65	41 04	23 94
290	256	Shutesbury,	24 64	42 98	20 02
205	257	Stow,	24 60	36 22	27 05
199	258	Rockport,	24 59	24 59	25 76
232	259	West Stockbridge,	24 52	40 18	20 11
250	260	Essex,	24 52	32 44	24 07
182	261	Norton,	24 35	29 04	24 83

SCHOOL RETURNS.

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Table showing the comparative amounts of money expended for the support, etc. — Continued.

Rank according to the amount yielded for each child in the average membership of the public schools by the local tax for school support.		TOWNS AND CITIES.	AMOUNT YIELDED FOR EACH CHILD IN THE AVERAGE MEMBERSHIP OF THE PUBLIC SCHOOLS BY THE —		Amount of local tax for school support for each child between 5 and 15 years of age.
			Local tax for support.	Local tax for support plus the State and other contributions.	
1911-12.	1912-13.				
266	262	Upton,	\$24 32	\$29 17	\$24 63
237	263	East Bridgewater,	24 13	27 32	24 94
201	264	Cheshire,	23 94	35 59	20 93
327	265	Sandisfield,	23 94	43 68	19 65
267	266	Freetown,	23 89	35 24	20 68
246	267	Sterling,	23 61	37 55	22 30
242	268	Sutton,	23 49	28 62	15 47
318	269	Mount Washington,	23 49	110 94	21 35
346	270	Tyringham,	23 46	39 71	19 88
301	271	Berlin,	23 39	47 20	19 00
269	272	Conway,	23 39	33 39	22 41
230	273	Tisbury,	23 39	31 69	26 03
270	274	Fairhaven,	23 25	50 05	19 91
154	275	Lanesborough,	23 03	42 35	21 50
253	276	Huntington,	22 99	31 94	20 29
222	277	New Braintree,	22 96	57 97	20 09
308	278	Paxton,	22 87	46 33	18 35
283	279	Hubbardston,	22 85	33 45	22 85
265	280	Methuen,	22 64	23 19	18 28
286	281	Becket,	22 59	41 87	18 99
254	282	Sheffield,	22 36	30 76	24 43
345	283	Clarksburg,	22 29	28 17	15 88
275	284	West Bridgewater,	22 29	26 53	20 49
299	285	Medway,	22 29	26 46	23 64
248	286	Douglas,	22 28	29 06	18 33
341	287	Cummington,	22 02	49 78	17 32
278	288	Randolph,	22 01	24 07	20 01
245	289	Chester,	22 01	32 08	21 66
258	290	Uxbridge,	22 00	24 32	22 93
247	291	Raynham,	21 99	34 96	19 05
225	292	Southwick,	21 91	41 78	22 32
312	293	Heath,	21 85	42 28	21 85
239	294	Hinsdale,	21 76	34 92	19 22
334	295	Brimfield,	21 72	32 52	27 60
291	296	Hatfield,	21 62	26 85	20 56
316	297	Worthington,	21 59	47 74	18 80
295	298	Buckland,	21 49	34 04	18 73
264	299	Chesterfield,	21 48	43 90	19 12
257	300	Rochester,	21 32	43 08	20 81
303	301	Templeton,	21 28	24 51	18 73
297	302	Rowe,	21 09	38 71	16 64
309	303	Belchertown,	21 04	29 15	20 04
293	304	Holbrook,	21 00	24 10	21 43
319	305	Provincetown,	20 99	23 10	20 69
298	306	Colrain,	20 98	32 00	20 91
304	307	Williamsburg,	20 94	29 98	24 22
311	308	Otis,	20 67	37 89	19 06
296	309	Erving,	20 22	29 24	21 09
330	310	Montgomery,	20 00	71 39	16 22
260	311	Monroe,	19 60	61 20	22 76
351	312	Egremont,	19 57	51 93	16 73
294	313	Swansea,	19 53	26 27	17 99
322	314	Phillipston,	19 49	43 35	15 77
317	315	Rehoboth,	19 15	27 17	16 14
321	316	Plainfield,	19 13	55 35	16 16
125	317	Middleton,	19 05	36 99	16 07

BOARD OF EDUCATION.

Table showing the comparative amounts of money expended for the support,
etc. — Concluded.

Rank according to the amount yielded for each child in the average membership of the public schools by the local tax for school support.		TOWNS AND CITIES.	AMOUNT YIELDED FOR EACH CHILD IN THE AVERAGE MEMBERSHIP OF THE PUBLIC SCHOOLS BY THE —		Amount of local tax for school support for each child between 5 and 15 years of age.
			Local tax for support.	Local tax for support plus the State and other contributions.	
1911-12.	1912-13.				
331	318	Avon, . . .	\$18 79	\$24 99	\$17 70
281	319	Somerset, . . .	18 71	21 49	17 98
325	320	Seekonk, . . .	18 70	23 81	16 28
289	321	Boxborough, . . .	18 50	48 54	15 99
276	322	Eastham, . . .	18 25	40 05	18 61
313	323	East Longmeadow, . . .	18 19	33 51	17 44
302	324	Whately, . . .	18 09	33 46	12 41
314	325	Auburn, . . .	18 07	22 94	14 36
310	326	Salisbury, . . .	17 96	25 07	14 99
324	327	Blackstone, . . .	17 66	18 27	14 29
336	328	Ashfield, . . .	17 56	34 75	24 07
333	329	Southampton, . . .	17 40	38 76	14 76
343	330	Truro, . . .	17 11	32 15	13 49
268	331	Greenwich, . . .	16 77	53 01	9 47
342	332	Pelham, . . .	16 11	26 44	13 19
338	333	Savoy, . . .	15 37	37 02	13 49
335	334	Hampden, . . .	15 07	39 04	16 29
339	335	Plympton, . . .	15 00	31 05	11 76
306	336	Leverett, . . .	14 81	31 98	14 69
326	337	Wales, . . .	14 80	39 70	14 52
332	338	Middlefield, . . .	14 73	37 99	16 41
315	339	Hawley, . . .	14 73	38 92	13 12
287	340	Florida, . . .	14 58	39 59	12 71
337	341	Gill, . . .	14 57	30 82	13 10
305	342	Oakham, . . .	14 44	45 95	12 73
344	343	Goshen, . . .	13 98	48 22	13 37
340	344	Berkley, . . .	13 74	26 66	11 63
349	345	Alford, . . .	13 66	51 21	11 43
320	346	Hancock, . . .	13 37	38 99	10 48
348	347	Westhampton, . . .	12 97	41 69	9 71
307	348	West Tisbury, . . .	12 11	43 90	10 96
323	349	Bernardston, . . .	11 67	31 34	13 16
300	350	Prescott, . . .	11 42	50 87	10 85
347	351	Leyden, . . .	11 27	38 00	8 99
350	352	New Ashford, . . .	8 82	55 56	7 89
353	353	Gay Head, . . .	4 69	44 13	4 84

II. GRADUATED VALUATION TABLE.

A graduated table in which all the towns and cities of the State are numerically arranged according to the proportion of their taxable property appropriated for the support of public schools during the last preceding town or city fiscal year (1912-13).

For 1911-1912, by the State valuation of 1911.		TOWNS AND CITIES.	Amount appropriated to the support of public schools for each thousand dol- lars of valuation.	For 1911-1912, by the State valuation of 1911.		TOWNS AND CITIES.	Amount appropriated to the support of public schools for each thousand dol- lars of valuation.
For 1912-1913, by the State valuation of 1912.							
		State,	\$4 45	21	42	Pembroke,	\$7 26
				71	43	Orange,	7 25
24	1	Clarksburg,	13 06	47	44	Hopkinton,	7 25
5	2	West Boylston,	9 97	160	45	Warwick,	7 23
4	3	Huntington,	9 89	10	46	Hinsdale,	7 21
12	4	Monson,	9 25	42	47	Hudson,	7 20
82	5	Sturbridge,	9 24	72	48	West Stockbridge,	7 19
2	6	Boylston,	8 90	27	49	Chicopee,	7 19
7	7	Montague,	8 57	102	50	Savoy,	7 19
15	8	Northbridge,	8 54	23	51	Saugus,	7 18
22	9	Palmer,	8 49	49	52	Williamsburg,	7 15
49	10	Plainville,	8 47	40	53	Rockland,	7 12
6	11	Chester,	8 43	17	54	Granby,	7 08
18	12	Grafton,	8 39	171	55	Rutland,	7 08
1	13	Charlemont,	8 35	111	56	Kingston,	7 06
11	14	Colrain,	8 33	218	57	Hadley,	7 05
14	15	Groveland,	8 32	56	58	Everett,	7 04
53	16	Dracut,	8 27	44	59	Holden,	7 03
16	17	Oxford,	8 14	68	60	Ashby,	7 02
29	18	Adams,	8 13	147	61	Maynard,	7 01
25	19	Belchertown,	8 11	188	62	Acushnet,	7 00
31	20	Millbury,	8 06	128	63	Bolton,	6 99
13	21	South Hadley,	8 06	32	64	Dighton,	6 98
9	22	Warren,	8 02	61	65	Braintree,	6 96
67	23	New Salem,	7 95	59	66	Bellingham,	6 94
168	24	Mansfield,	7 95	86	67	Westfield,	6 94
91	25	Franklin,	7 73	114	68	West Newbury,	6 93
30	26	Bridgewater,	7 70	79	69	East Bridgewater,	6 91
57	27	Avon,	7 63	124	70	Littleton,	6 90
51	28	Petersham,	7 62	58	71	Natick,	6 88
28	29	Middleborough,	7 55	50	72	Chelmsford,	6 88
77	30	Leicester,	7 51	54	73	Rowe,	6 88
26	31	Ware,	7 50	173	74	Heath,	6 87
3	32	Abington,	7 49	100	75	Merrimac,	6 84
36	33	Blackstone,	7 49	162	76	Brimfield,	6 83
60	34	Pepperell,	7 46	90	77	Whitman,	6 81
35	35	Templeton,	7 45	98	78	Ludlow,	6 81
39	36	Norwell,	7 40	165	79	Hardwick,	6 79
73	37	Provincetown,	7 39	206	80	Westport,	6 78
78	38	Clinton,	7 36	64	81	Acton,	6 77
83	39	Stoneham,	7 35	99	82	Athol,	6 74
8	40	Sunderland,	7 30	202	83	Holliston,	6 73
137	41	Wrentham,	7 30	55	84	Westford,	6 71

For 1911-1912, by the State valuation of 1911.	For 1912-1913, by the State valuation of 1912.	TOWNS AND CITIES.	Amount appropriated to the support of public schools for each thousand dol- lars of valuation.	For 1911-1912, by the State valuation of 1911.	For 1912-1913, by the State valuation of 1912.	TOWNS AND CITIES.	Amount appropriated to the support of public schools for each thousand dol- lars of valuation.
45	85	Spencer, . . .	\$6 71	144	145	New Marlborough, . . .	\$5 92
33	86	Norton, . . .	6 70	261	146	Sharon, . . .	5 91
20	87	Hawley, . . .	6 69	259	147	Royalston, . . .	5 90
107	88	Rehoboth, . . .	6 69	164	148	North Andover, . . .	5 89
122	89	North Adams, . . .	6 67	215	149	Andover, . . .	5 86
87	90	Lee, . . .	6 63	136	150	Arlington, . . .	5 86
120	91	Winchendon, . . .	6 63	126	151	Hanover, . . .	5 85
63	92	Dudley, . . .	6 62	133	152	Mendon, . . .	5 84
41	93	West Bridgewater, . . .	6 61	129	153	Buckland, . . .	5 82
66	94	Cheshire, . . .	6 58	65	154	Williamstown, . . .	5 81
70	95	Holbrook, . . .	6 56	95	155	Uxbridge, . . .	5 80
84	96	Auburn, . . .	6 55	140	156	Melrose, . . .	5 79
123	97	Upton, . . .	6 54	109	157	Dalton, . . .	5 78
74	98	Dennis, . . .	6 54	101	158	Brockton, . . .	5 73
118	99	Foxborough, . . .	6 49	94	159	Sutton, . . .	5 71
103	100	Wilmington, . . .	6 49	156	160	Douglas, . . .	5 69
97	101	Danvers, . . .	6 44	106	161	Shelburne, . . .	5 68
104	102	Sandwich, . . .	6 43	127	162	Otis, . . .	5 66
119	103	Conway, . . .	6 42	200	163	Berlin, . . .	5 66
43	104	Weymouth, . . .	6 37	125	164	North Brookfield, . . .	5 66
93	105	Medway, . . .	6 35	175	165	Greenfield, . . .	5 62
80	106	Middlefield, . . .	6 34	199	166	Georgetown, . . .	5 60
105	107	East Longmeadow, . . .	6 33	151	167	Medford, . . .	5 59
121	108	Brookfield, . . .	6 33	187	168	Gloucester, . . .	5 58
113	109	Taunton, . . .	6 29	166	169	Freetown, . . .	5 57
152	110	Dartmouth, . . .	6 28	189	170	No. Attleborough, . . .	5 55
92	111	Barre, . . .	6 26	150	171	Gardner, . . .	5 54
96	112	Chelsea, . . .	6 21	149	172	Charlton, . . .	5 54
115	113	Woburn, . . .	6 19	213	173	Concord, . . .	5 53
48	114	Ashburnham, . . .	6 19	182	174	Tewksbury, . . .	5 52
46	115	Wilbraham, . . .	6 18	208	175	Lexington, . . .	5 51
89	116	Wakefield, . . .	6 16	148	176	Northampton, . . .	5 48
112	117	Marlborough, . . .	6 16	158	177	Walpole, . . .	5 48
195	118	Granville, . . .	6 16	153	178	Wayland, . . .	5 46
106	119	Tyngsborough, . . .	6 13	176	179	Worcester, . . .	5 44
88	120	Randolph, . . .	6 13	172	180	Amherst, . . .	5 43
69	121	Somerset, . . .	6 12	273	181	Dunstable, . . .	5 43
37	122	Windsor, . . .	6 11	38	182	Leverett, . . .	5 43
159	123	Peabody, . . .	6 11	196	183	Billerica, . . .	5 42
76	124	Sheffield, . . .	6 11	135	184	Needham, . . .	5 41
85	125	Haverhill, . . .	6 07	167	185	Reading, . . .	5 41
110	126	Methuen, . . .	6 07	180	186	Great Barrington, . . .	5 39
132	127	Stoughton, . . .	6 07	143	187	Hubbardston, . . .	5 38
52	128	Ashland, . . .	6 06	212	188	Essex, . . .	5 33
170	129	Enfield, . . .	6 06	161	189	Stow, . . .	5 32
145	130	Harwich, . . .	6 06	177	190	Berkley, . . .	5 30
163	131	Leominster, . . .	6 05	130	191	Dana, . . .	5 30
75	132	Townsend, . . .	6 05	190	192	Plymouth, . . .	5 28
146	133	Southborough, . . .	6 04	209	193	Russell, . . .	5 27
154	134	Revere, . . .	6 04	223	194	Chatham, . . .	5 26
131	135	West Springfield, . . .	6 03	205	195	Becket, . . .	5 26
278	136	Cummington, . . .	6 02	221	196	Quincy, . . .	5 25
197	137	Westborough, . . .	6 02	62	197	Lanesborough, . . .	5 24
134	138	Sudbury, . . .	6 00	220	198	Pittsfield, . . .	5 24
141	139	Malden, . . .	5 99	184	199	West Brookfield, . . .	5 24
138	140	Somerville, . . .	5 98	194	200	Frammingham, . . .	5 19
116	141	Westminster, . . .	5 97	181	201	Hanson, . . .	5 18
139	142	Agawam, . . .	5 97	185	202	Rockport, . . .	5 17
193	143	Worthington, . . .	5 94	157	203	Chesterfield, . . .	5 15
81	144	Northborough, . . .	5 93	192	204	Fairhaven, . . .	5 14

SCHOOL RETURNS.

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For 1911-1912, by the State valuation of 1911.	For 1912-1913, by the State valuation of 1912.	TOWNS AND CITIES.	Amount appropriated to the support of public schools for each thousand dol- lars of valuation.	For 1911-1912, by the State valuation of 1911.	For 1912-1913, by the State valuation of 1912.	TOWNS AND CITIES.	Amount appropriated to the support of public schools for each thousand dol- lars of valuation.
117	205	Raynham, . . .	\$5 14	274	265	Barnstable, . . .	\$4 18
226	206	Easton, . . .	5 12	303	266	Mashpee, . . .	4 16
201	207	Fall River, . . .	5 11	297	267	Polham, . . .	4 12
228	208	Amesbury, . . .	5 06	312	268	Lynnfield, . . .	4 12
183	209	Milford, . . .	5 06	234	269	Lawrence, . . .	4 10
186	210	Holyoke, . . .	5 05	191	270	Monroe, . . .	4 07
203	211	Ayer, . . .	5 03	216	271	Leyden, . . .	4 06
244	212	Shirley, . . .	5 03	253	272	Sherborn, . . .	4 05
155	213	Norfolk, . . .	4 98	247	273	Eastham, . . .	4 03
239	214	Seekonk, . . .	4 98	291	274	Beverly, . . .	4 03
217	215	Northfield, . . .	4 97	260	275	Stockbridge, . . .	4 00
302	216	North Reading, . . .	4 91	285	276	Wellfleet, . . .	3 99
292	217	Sandisfield, . . .	4 89	264	277	New Braintree, . . .	3 98
238	218	Easthampton, . . .	4 89	339	278	Wendell, . . .	3 95
299	219	Longmeadow, . . .	4 89	333	279	Burlington, . . .	3 95
191	220	Millis, . . .	4 86	256	280	Halifax, . . .	3 95
275	221	Richmond, . . .	4 84	294	281	Montgomery, . . .	3 94
210	222	Plainfield, . . .	4 83	277	282	Bedford, . . .	3 92
179	223	Canton, . . .	4 81	254	283	Sterling, . . .	3 90
265	224	Newburyport, . . .	4 80	232	284	Lakeville, . . .	3 89
211	225	Belmont, . . .	4 77	288	285	Harvard, . . .	3 88
243	226	Lynn, . . .	4 74	279	286	Lenox, . . .	3 88
229	227	Cambridge, . . .	4 72	169	287	Paxton, . . .	3 88
227	228	Dedham, . . .	4 71	241	288	Newbury, . . .	3 87
225	229	Winchester, . . .	4 68	283	289	Norwood, . . .	3 87
276	230	Truro, . . .	4 68	237	290	Waltham, . . .	3 86
214	231	Lowell, . . .	4 66	286	291	Yarmouth, . . .	3 78
246	232	Winthrop, . . .	4 63	280	292	Westhampton, . . .	3 78
271	233	Phillipston, . . .	4 62	207	293	Bernardston, . . .	3 77
242	234	Fitchburg, . . .	4 61	272	294	Hingham, . . .	3 74
224	235	Salem, ¹ . . .	4 55	305	295	Webster, . . .	3 72
222	236	Springfield, . . .	4 52	178	296	Rochester, . . .	3 70
250	237	Whately, . . .	4 46	281	297	Princeton, . . .	3 61
174	238	Peru, . . .	4 46	311	298	Nantucket, . . .	3 59
255	239	Boxborough, . . .	4 45	287	299	Duxbury, . . .	3 58
219	240	Gill, . . .	4 44	300	300	Scituate, . . .	3 57
258	241	Watertown, . . .	4 41	336	301	Shutesbury, . . .	3 55
267	242	Edgartown, . . .	4 40	289	302	Washington, . . .	3 54
263	243	Swansea, . . .	4 40	306	303	Carver, . . .	3 49
266	244	Ipswich, . . .	4 40	293	304	Marblehead, . . .	3 45
325	245	Monterey, . . .	4 39	323	305	Boston, . . .	3 45
262	246	Ashfield, . . .	4 39	240	306	Salisbury, . . .	3 44
233	247	Deerfield, . . .	4 37	313	307	Gay Head, . . .	3 41
282	248	Hatfield, . . .	4 36	309	308	Swampscott, . . .	3 39
245	249	Erving, . . .	4 35	326	309	Mattapoisett, . . .	3 29
251	250	Lunenburg, . . .	4 32	316	310	Milton, . . .	3 28
257	251	Wareham, . . .	4 31	301	311	Tisbury, . . .	3 27
248	252	Newton, . . .	4 30	331	312	Holland, . . .	3 25
284	253	Carlisle, . . .	4 29	298	313	Lancaster, . . .	3 23
249	254	Southampton, . . .	4 29	345	314	Tyringham, . . .	3 22
34	255	Florida, . . .	4 29	231	315	Prescott, . . .	3 19
252	256	Attleborough, . . .	4 27	290	316	Greenwich, . . .	3 16
307	257	Brewster, . . .	4 26	269	317	Oakham, . . .	3 11
236	258	Hampden, . . .	4 26	304	318	Marshfield, . . .	3 09
270	259	Southbridge, . . .	4 25	322	319	Weston, . . .	3 06
198	260	Shrewsbury, . . .	4 23	315	320	Wellesley, . . .	3 05
296	261	Blandford, . . .	4 21	308	321	Westwood, . . .	3 05
204	262	Southwick, . . .	4 19	320	322	Hamilton, . . .	3 05
295	263	Medfield, . . .	4 18	329	323	Oak Bluffs, . . .	3 04
268	264	New Bedford, . . .	4 18	334	324	Alford, . . .	3 03

¹ Financial returns cover a period of eleven months only.

BOARD OF EDUCATION.

For 1911-1912, by the State valuation of 1911.	For 1912-1913, by the State valuation of 1912.	TOWNS AND CITIES.	Amount appropriated to the support of public schools for each thousand dol- lars of valuation.	For 1911-1912, by the State valuation of 1911.	For 1912-1913, by the State valuation of 1912.	TOWNS AND CITIES.	Amount appropriated to the support of public schools for each thousand dol- lars of valuation.
230	325	Middleton, . . .	\$3 01	310	340	Tolland, . . .	\$2 45
319	326	Goshen, . . .	2 95	337	341	Cohasset, . . .	2 41
321	327	Groton, . . .	2 90	352	342	Egremont, . . .	2 35
327	328	Wenham, . . .	2 90	340	343	Brookline, . . .	2 30
314	329	Plympton, . . .	2 88	344	344	Hull, . . .	2 26
330	330	Orleans, . . .	2 86	338	345	Mt. Washington, . .	2 10
346	331	Chilmark, . . .	2 77	348	346	Boxford, . . .	1 97
318	332	Bourne, . . .	2 76	341	347	Dover, . . .	1 87
328	333	Lincoln, . . .	2 69	343	348	Topsfield, . . .	1 80
324	334	Hopedale, . . .	2 67	350	349	Marion, . . .	1 64
332	335	New Ashford, . . .	2 66	349	350	Manchester, . . .	1 59
347	336	Rowley, . . .	2 65	342	351	West Tisbury, . . .	1 08
335	337	Wales, . . .	2 64	351	352	Nahant, . . .	97
317	338	Falmouth, . . .	2 63	353	353	Gosnold, . . .	48
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